CONVENTION NUMBER—JANUARY, 1916

Gerreplete 1. b. Litrary Green B.



MONTANA BALED WOOL

January,

ANNOUNCEMENT

THE KNOLLIN SHEEP COMMISSION CON

The older we grow and the better prepared we are to serve our customers, the less we are inclined to blow about it. It is our WORK and not our WORDS that we want the sheepmen to know

We have contracted this page for the year 1916. We shall endeavor to make it as valuable and as interesting a page as will be found from cover to cover of this splendid sheepmen's paper.

When a witness is to testify in court, a foundation is first laid proving his competency to give evidence in the case under consideration. To prove our competency, we present the following facts. In 1866, fifty years ago, the founder of the business, from which has developed The Knollin Sheep Commission Company, James C. Knollin, started in business at the Old Broadway Stock Yards, St. Louis, Missouri. Mr., James C. Knollin continued in business at the Old Broadway Yards until the growth of the city and the development of the livestock market compelled the abandonment of the Broadway Stock Yards and the building of larger and more modern stock yards some two miles further out. The St. Louis Union Stock Yards were built about 1870 and located at a point on the Mississippi River, where boats could load and unload their consignments direct into the Stock Yards-a large percentage of the stock marketed at St. Louis in those days came by boat, but of this we will have more to say later. This our first article, a brief history of the sheep business for the past half century, is but a preface, and, as we have said, we must first prove our competency to testify. Making the sheep business a specialty as he did-and there being at that time so few engaged in that branch of the livestock industry—the founder of The Knollin Sheep Commission Company became so noted as an expert in sheep as well as for his integrity that he was known throughout the whole country and all markets where they were handled as "Judge" Knollin and we shall so call him in our future references. Judge Knollin was of English parentage, born December 12, 1831, in the Province of New Brunswick, therefore an English subject. His father followed the sea and was captain of a whaling vessel and was gone on long voyages. The mother reared a familv of five sons and three daughters. They were pioneers out of St. Johns, New Brunswick, some forty miles up the St. Johns River. Marketing was done at St. Johns by sleighs during the winter, the road being on the ice-bound river. A home of logs was built there, which were literally hewn out of the timber by the boys directed largely by their mother. Captains of whaling vessels of those days were indeed important personages, and were considered masters of men, and were looked upon by the members of the families of the ship crews with awe, inspired no doubt by stories brought home by unruly members of the crew, who had aroused the captain's ire. Such men, however, underneath had tender and brave hearts. During the intervals at home, the father planned further farm developments and managed the boys much as he managed his crew, brooking no excuse for work undone. Captain Knollin's boys like his crew learned that orders were given to be obeyed and held their father in rather awed respect. In after life Judge Knollin frequently referred to his mother with great reverence as being a most tender mother with deep religious convictions, which she so thoroughly imparted to all her children so that they desired above all things to be worthy of a home in God's Kingdom. The older brother was for over forty years pastor of one church in a fishing settlement on the coast of Nova Scotia. Judge Knollin although he was never ordained to the ministry was a close student of the Bible and a deep thinker on subjects of religious doctrine, and during his life he many times preached in the absence of regular pastors and was ever a temperance worker. He was invited to address a temperance convention at Lawrence, Kansas, and made the journey from St. Louis for that purpose when the fight was on for prohibition in Kansas. Judge Knollin continued in the sheep business at St. Louis until 1886, when he moved to Kansas City to join there in business with his eldest son, Albert J., who had gone from St. Louis to Kansas City in March, 1883, and of whom we will write in our next article.

Western Union Telegram

South Omaha, Neb., Jan. 6, 1916

To A. J. Knollin, Salt Lake City

WE SOLD THE FIRST TEN CENT LAMBS TO KILLERS HERE TODAY.

Knollin Sheep Commission Co.

1916

KANSAS CITY STOCK YARDS

A "Live" Market as Well as a Live Stock Market"

Best Market for the Western Ranchman or Feeder.

World's Greatest Stocker and Feeder Market.

Eight Big Packing Houses and Many Order Buyers.



THE KANSAS CITY LIVESTOCK EXCHANGE BUILDING LARGEST IN THE WORLD

Packers Need More Sheep and Lambs at Kansas City.

The Corn Belt Re-stocks its Breeding Herds Here.

Great Demand for Feeding Sheep and Lambs at Kansas City.

The Union Pacific's new short line to Kansas City, via Gibbon, Marysville and Topeka, cuts the distance from Wyoming, Utah, Idaho and other Western States to Kansas City more than 100 miles. Same rates apply to Kansas City as to other Missouri River Markets. Distance to Kansas City is practically the same as to other Missouri River Markets.

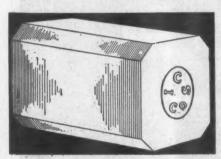
Great Demand-Active Competition-Your Best Outlet.

Watch Kansas City Prices-They are the Highest.

Try the Kansas City Market-You Will be Satisfied.

EVERYTHING IN SALT

Table Salt, Dairy Salt, Hide Salt, No. 1 Salt, Pickle Salt,



Mined Rock Salt, No. 2 Sheep Salt and all other grades and all of first quality.

We never lose a customer because we give quality and accord honorable treatment. We are in business to stay.

INLAND CRYSTAL SALT CO.

SALT LAKE CITY, UTAH

Janua

"We want to get acquainted with every Sheepman at the CONVENTION Please call and see us."

LARGEST DEALERS IN THE WEST

OF ALL KINDS OF SHEEPMENS SUPPLIES

EXCLUSIVE WESTERN DISTRIBUTORS FOR

Stewart Shearing Machines. Stewart "Little Wonder" Machines. Cooper's Fluid and Powder Dips.

Kemp's Branding Liquid.

WOOL BAGS

TWINE

HAND SHEARS

THE SALT LAKE HARDWARE CO.

257 MAIN STREET

WALNUT HALL and ENGLAND

Are two places where the best Hampshires can be bought.



SOME OF THE WALNUT HALL STUD RAMS-These rams were machine sheared two months before photo was taken.

We will write you a contract for delivery dated any time after June 15th; or import for you with our own shipment in July.

Address all communications to- Robt. S. Blastock, Mgr., Box Y, Walnut Hall Farms, Donerail, Ky.



O EVERY MAN, THERE COMES ONCE IN A LIFE TIME, A GREAT DISCOVERY, WE HAD HEARD OF THE NUMEROUS COMPLAINTS MADE BY WOOL BUYERS AS TO THE PARTICLES OF JUTE THAT WOULD BECOME MIXED WITH THE WOOL, AND THE VERY UNSATISFACTORY RESULTS OBTAINED FROM THE USE OF JUTE, HEMP AND SIMILAR TWINES. WE KNEW THERE WAS A DEMAND FOR A FLEECE TWINE MADE FROM PAPER, THAT WOULD BE STRONG, VERY PLIABLE, PROOF AGAINST GREASES, AND A TWINE THAT WOULD STAY TIED. AFTER NUMEROUS EXPERI-MENTS, WE PRODUCED OUR "VERYBEST" FOUR PLY PAPER FLEECE TWINE, WHICH HAS PROVEN AFTER SEVERAL YEARS OF SEVERE TESTS, TO BE THE IDEAL TWINE FOR THE PURPOSE, IT IS USED AND RECOMMENDED BY THE LARGEST AND MOST EXPERIENCED SHEEPMEN IN THE COUNTRY. YOUR WOOL WILL BRING YOU MORE MONEY TIED WITH "VERYBEST." ACCEPT NO SUBSTI-TUTES. ORDER TO-DAY FROM YOUR NEAREST DEALER.

HOW PACKED FOR SHIPMENT

250 LENGTHS, 6% FEET EACH, TIED IN A SMALL BUNDLE. EIGHT OF THE SMALL BUNDLES TIED INTO A LARGER BUNDLE CONTAINING 2,000 LENGTHS, 81/2 FEET EACH. FIVE OF THE LARGER BUNDLES PACKED IN A BALE FOR SHIP-MENT, CONTAINING 10,000 LENGTHS, 8½ FEET EACH. WEIGHT OF BALE ABOUT 220 LBS.

DISTRIBUTORS

AMES-HARRIS-NEVILLE

SAN PRANCISCO

NORTHERN BAG CO.

MINNEAPOLIS

SHIP YOUR

PELTS,

HIDES and FURS

To Utah Hide & Livestock Co.

[Established 1891]

Salt Lake City, Utah

Whether You Ship a Dozen Skins or a Carload You Will Receive

Market Prices Liberal Grading
Prompt Returns

Quotations and Shipping Tags on Request

THE NATIONAL WOOL GROWER

NUMBER 1 JANUARY, 1916

Address of President F. J. Hagenbarth Delivered at 52nd Annual Convention, National Wool Growers' Association, January 13, 1916.

just closed forever behind us, will long stand as a red letter year in the annals of sheep husbandry. The most continued high prices for our output since about the time of the Civil War have attended the marketing of all products; the seasons have been

unusually kind and the allied agencies, through which we go to market, have, as a rule, been unusually helpful. With the exception of pending and, as it now looks, almost certain land legislation in Congress, and the further exception of certain adverse and, as some of us believe, unjust court decisions in certain states, there has been no cloud on the horizon during this happy period.

It seems my duty as president of your organization, however, at this time to sound a note of warning. Every student of economic affairs knows that periods of prosperity are usually followed by eras of depression. It is not within my province to inquire into the why or wherefores of this well known phenomenon, I will simply state it here as a fact. This being the case, it would seem that the present is an appropriate time for each and everyone of us to so trim our

sails as to weather any possible storms that the future may have in store. This is a golden time in which to pay off mortgages, and not to create them. It is the time to trim up our flocks to a superior standard by marketing all undesirable elements. It is a time to set aside for our children that certain sum which we have always wished we had for their proper education and advantage. It is the time to give to the good

next to ours against the wheel for, lo, these many years, those modern advantages and improvements about her home which will make the burden of her remaining years lighter and her every hour happier. Thus, let us convert our paper profits at the present

F. J. HAGENBARTH.

time, wherever consistent, into real profits, which in the long run usually prove more lasting and will add a greater quota of happiness to ourselves and all dependent upon us.

It has been said that opportunity knocks once at every man's door. This may or may not be true; it usually knocks oftener. However, we must feel that the present is an opportunity, and I urge with whatever influence I

THE year 1915, whose portals have housewife, whose shoulder has been have and with the deepest conviction that proper conservatism at this time will dictate the course which I herein advocate lest in the midst of all the great hurly burly of prosperity which now seems about to sweep us from our heretofore solid moorings of economy, thrift and strife into the open sea of

inflation, we may forget our deeper obligations. History of the past will warn us that even now we should listen afar off for the warning signals amid the fogs of speculation and inflation with their attendant miseries.

Forest Reserves.

The wool industry is under lasting obligations to the Department of Agriculture by reason of the experiments which the Department has been carrying on in connection with the breeding and feeding of lambs. The results of these experiments when locally and individually applied throughout the woolgrowing area will in time prove of inestimable value to the industry. Many individuals, not having the means or the facilities or inclination for making such experiments, are given the benefit thereof for future guidance. The Department promises to make still further investigations along

these lines as well as to the development of an all purpose American sheep, and I am sure that this association wishes it God speed and stands ready to co-operate and assist in any possible manner.

The administration of the Forest Reserves grows better from year to year. We still feel that there is room for closer co-operation between the Forest Service and the woolgrower. One in-

el

tr

of

fle

li

m

e

d

th

a

p

u

stance that comes within my view is that the Forest Service and woolgrowers should unite in preparing a bill and urging its adoption by Congress, which will provide for large trails across the public domain leading to and from the different forests to the various spring, fall and winter ranges. Class legislation and court decisions have reached a point in some of the states, notably in Idaho, that the life of the industry itself is at stake and some action must be taken by legislation or otherwise which will provide for a safe and reasonable administration of our great industry in its every day practical requirements.

Public Lands.

I can remember the time when the average sheepman, and many of us who are present today were among the number, would call down the wrath of Heaven on anyone who advocated that any possible good could come from such an institution as the Forest Reserves. The advocates of such a system were in those days in a decided minority. Today the proportions are reversed and the opponents of the Forest Reserves are in a decided minority among the stock growers.

Such a condition is gradually developing in the matter of the proper disposal of the remaining public lands. A few years ago the isolated voice which had the temerity to propose such a leasing proposition was hurriedly drowned out of recognition. Today, in my judgment, there are more advovates of the leasing of public lands than there are opponents, and a few years I anticipate the development of a universal sentiment in favor of such legislation on the part of Congress. However, in view of the present trend of mind of the law-making body at Washington and in the event that their present convictions are effected into law, we can well feel alarmed as to the future of any land leasing legislation. If the present plans of Congress are carried out, when the western American stockgrowers and citizens in general awaken to the fact that the leasing of public grazing areas is a necessity, it will have been too

late. We will lock the barn after the horse is stolen.

To make more clear the meaning of the statement just made, I will call your attention to the present 640-acre homestead bill now pending before Congress and which, unless serious and insistent educational work is done, will soon become a law. Those of you who are familiar with the usual result of such legislation well know that within a decade of years seventy-five per cent of the best and most available public grazing area will have passed into the hands of large corporations and that the smaller and more dependent stockmen will be practically out of business. The law itself is built on theory and is not practical. Were the limit raised to three or four sections of land for a grazing homestead, it would begin to look a little practical. The limit has been placed just low enough so that while there is an inducement to take so much land there is not enough of it to furnish a grazing area, affording the proper variety of range, water facilities and other necessaries for successful grazing, but there is enough inducement in it to cause the land speculator and what we call the "range black mailer" and the land grabber-who hires entrymen to take lands for him-and others of like ilk to make such a rush on the public domain that within a short time it will have practically disappeared. During the transition the bonifide stockman, who is carrying on a successful business under present conditions will have disappeared from the scene of action and the only ones left will be the big fellows who have had the foresight and the nerve to take advantage of the law and its nefarious provisions.

The premises established by Congress in its efforts to place this law on the statute books are correct in as much as they say that "it is for the purpose of providing grazing area for those in need of them." Than this, however, we can endorse the law no further. If Congress is sincere in its desire to provide grazing areas there is one consistent and proper way to do it, as has been demonstrated in

every other stock growing country in the world and in at least one American state. The successful process of fostering, developing and controlling the livestock industry has invariably been through the leasing of the public domain. The State of Texas, during its entire history, has been one of the greatest livestock producing sections in America, and so it is today. No setback to any agriculture possibility or any other latent potentiality of her wonderful acres was caused by the fact that primarily the greater part of the state was for many years devoted to the growing of livestock. On the contrary her development has been rapid, diversified and along every line of human endeavor, and no man has ever been able to point his finger at any loss that was ever caused to the State of Texas by reason of its early occupation by livestock. The same holds true of New Zealand, the same is a fact in Australia, it has likewise been proven in the Argentines.

The enactment of the 640-acre homestead law means the passing forever of the control of these lands from the hands of the government or of the state, as the case may be. Should shiftless owners fall heir to these lands, they will never be properly developed. On the contrary, should they remain in the hand of the nation or the state. development can be made compulsory. I take it that the intent of Congress and the desire of the American people is for a larger production of meat and wool in order that these products may be cheaper. I contend that through the agencies afforded by the leasing of the public domain these primary requirements can be more quickly, more lastingly and more efficiently brought about than by any other system on earth. Which would be better, 640 acres in the hands of a non-progressive individual who is not able or who does not desire to expend the necessary moneys to reseed, to drill wells, or to properly stock the land, or 640 acres in the hands of the state or the government which has the power to say to the user thereof, "Now you either reseed this land, put water on it, stock it properly with cattle or sheep, or get off and give somebody else who will a chance." The administration of the Forest Reserves gives us a lasting and final answer to any critic of the manifold advantages that will flow from the leasing of the grazing areas.

I do not want to be understood as claiming that all lands included in the public domain should be leased. I believe, on the contrary, that the primary duty of Congress is to first properly classify all the remaining public domain. Having done this, I believe that those sections or areas which shall, after scientific analysis, have been proven better adapted and of greater use for farming should be so dedicated to farming. I believe that those sections or areas which experience, climate, elevation, soil conditions, waterfall or any other of the divers and diverse conditions, which go to make up a successful farming area show, are deficient or lacking and it is decreed that they are not suitable for farming, but that such areas are adaptable to the growing of livestock, then they should be consecrated to the production of livestock. In other words, let us not ruin a good livestock area by trying to make a poor farm and a poorer farmer.

Under present conditions I can foresee the time when the western range will afford one of two pictures, first, a lot of prosperous farms located on fertile stretches of land with ample markets for their produce, drawing from adjacent hills and deserts cattle and sheep which will consume at remunerative prices their surplus products, interspersed here and there throughout these areas thrifty little villages, each with its church and its school house and its happy community, and the whole including a citizenship of the highest type, prosperous, educated and contented, and a credit to this or any other country.

From the same material at hand, I can see another picture: Vast stretches of western country with here and there a farmer contending against over production of certain crops for which he has no market closer than a thousand

miles away; mile after mile of plowed, abandoned and desolated stretches with here and there a homesteader's shack falling to ruin and decay; a straggling village now and then with unpainted houses, wretched, poverty stricken. I hear no lowing of cattle or bleating of sheep around the winter hay stack, and the average citizen tells me he is a Socialist or an Anarchist and that he usually works 365 days in the year with the net result, poverty at the end of each and every year. find the forests denuded of cattle and sheep except here and there where certain individuals have succeeded in acquiring sufficient land holdings to maintain a flock or a herd and find opportunity to graze. .

Our eastern friends do not realize that conditions in the West are materially different from those in the East. They do not realize that our tremendous system of deserts and our mountain tops afford ample grazing during certain seasons of the year for millions of livestock. They do not understand that unless proper facilities are afforded these same livestock during the early spring and early fall months during the reproductive period that they cannot exist and, therefore, the grazing in the mountains and in the deserts must go to waste. They do not realize that fully half the prosperity of the West is dependent on livestock and on these same mountains and deserts; they do not realize that a lot of farmers with a lot of farms and no livestock to feed cannot prosper. Our country is not interspersed by a net work of railroads. Even now our surplus grains must be hauled, at a tremendous waste of freight, long distances before the net returns are available to the producer. Restrict the farmer's market still further by taking away from him the consumption of our livestock now being produced in the mountains and deserts, and the picture is an appalling one. It would seem to me that there is a middle way which can be followed in this whole controversy, which in the long run will give us diversification of products, utilize all of our resources and make a pros-

perous and united West. This middle way would consist of a motto which has long been a guiding star in our history: "The greatest good to the greatest number." A prosperous stockman is surely better, both for himself and the country than a half-starved farmer. I contend that a crime against the women and children of the coming generation is about to be perpetrated upon them by condemning them to an existence on a farm which was never intended by nature as such and which no effort of man nor any law passed by Congress can ever make a suitable home for women and children. We cannot undo the handiwork of God by any law we may pass. We can, however, visit untold calamities upon many communities which will take a generation and the slow process of readjustment to undo. To paraphrase the words of one who was supreme in his wisdom, let us render unto the farmer the things that are the farmer's and to the stockman the things that are the stockman's. Doing this, the question will be solved and solved properly. Those who demand a confirmation of these views. I will refer to the last annual report of the United States Secretary of Agriculture.

Foreign Imports and Disease.

Your President was called upon to attend the meeting in Chicago in December, called by the Department of Agriculture for the discussion of the foot and mouth disease and for ways and means to prevent further occurrences. He regrets to report that the program was limited to an extent which would not permit any discussion either by this association or the American National Livestock Association through its Secretary, Mr. Tomlinson, which would look to the placing the responsibility for the last outbreak and demanding more strict regulations on importations of wool, meats and other animal products, which we are convinced are the agencies through which the foot and mouth disease is brought into this country. We will not admit that the foot and mouth disease is inherent in the United States; we contend that it comes from the outside,

sh

sl

sl

p

al

fr

either through the importation of animals or animal products of some character. We feel that in this case an ounce of prevention is worth a ton of cure. We feel more like asking Congress for appropriations of a few hundred thousand for the prevention of the disease rather than asking for millions for its cure. However, at the present time, we have it and both things must be done. Congress must appropriate sufficient money to stamp out the present outbreak of foot and mouth disease, and I trust that resolutions to this effect will be forthcoming by this convention, as well as resolutions endorsing the splendid work done by the Bureau of Animal Industry during the last outbreak.

The voice of every livestock man and every farmer in these United States should be united in demanding more strict regulations covering the importation of wool, meats and other animal products. At the present time importation of these articles is unhampered and, as far as practical results are concerned, uninspected into this country. Proper safeguards must be thrown around such importations, not only by reason of foot and mouth disease, but by reason of general sanitary conditions.

Predatory Animals.

You are all no doubt aware that added to the seriousness of the loss which annually visits the stock industry of the West by reason of the depredation of coyotes and other predatory animals, that at the present time we are facing a serious menace to man himself in the states of Oregon, California, Nevada and Southern Idaho. Rabies among coyotes and dogs has assumed such serious and alarming proportions that many individuals have already been bitten and others are now suffering in the throes of hydrophobia, caused by the attacks of these mad animals. This does not take into account the heavy loss among horses and colts, cattle and hogs through the same agency. Sheep have not suffered so seriously owing to the fact that their wooly coat protects them to some extent from bites except on exposed surfaces. This situation has become so serious that a conference is now called to be attended by the various governors and veterinarians in the states in the area mentioned and some action must be taken.

I would suggest that the sheepmen although demanding proper legislation, should also take a more active part themselves in the destruction of these pests. I would that every stockman should make it his duty to prevent the perpetration of fraud in the collection of bounties and at all times and at all places use every effort against the coyote and his kind. By a united effort throughout the entire infested region in a few years we will be rid of these pests. If certain localities hold back, it is only a matter of time until the areas which have been cleaned will again become infested. Therefore, we must make a long pull, a strong pull and pull all together in order to accomplish the desired result. I trust that the committee on resolutions will speak strongly and forcefully on this subject.

Interstate Regulations.

It would seem to me that the element of human nature in the way of selfishness in the last few years has been a little too prone to assert itself in the matter of regulations made by various state bureaus of sheep commissioners governing the movement of livestock, especially sheep, from one state to another. With the practical disappearance of the scab throughout the western states, it would appear that a more friendly feeling toward the industry generally should prevail and that unreasonably stringent regulations as they now exist in some states should be modified. Geographical and topographical conditions are such that it is often times necessary for the well being of the industry in certain states that sheep pass from one state to another. It is not honorable nor in accord with proper business principles that a law which was designed for the protection of the industry should be invoked in order that the industry might be injured. Our brotherhood should be great enough and our play should be fair enough so that such practices should not be indulged.

Regulating Shipments.

I cannot but reiterate what I have stated in every address which I have had the honor to make to this body, the necessity of still further regulating our marketing and shipment of lambs, mutton and wool. Through intelligent effort a material increase in early lambs is to be looked for from now on. This production must be safeguarded on the market. In June and July lambs begin to strike the eastern markets from Kentucky and Tennessee and other southern states. These are fairly well marketed by the middle of July. The coming year we do not look for such heavy shipments from the South by reason of the fact that they were unable to restock last year with ewes for breeding to the same extent as heretofore. I have maintained and still maintain that a bureau should be organized within this association wherein would be listed all the lambs to be shipped from the Intermountain territory and that after these reports have all been received they should be tabulated, printed in the Wool Grower and thus become a source of common information and a basis of action on the part of the shippers. I believe that great good would flow from such a move at this time and would request that a committee be appointed for the purpose of carrying this suggestion into effect. If by any means we can establish an approximate even distribution of our lamb product throughout the months of July, August, September, October and November, we will have saved at one period or another throughout this term many hundreds of thousands of dollars annually to the sheepmen.

I wish again to call attention to the splendid work done in the past year by the National Wool Warehouse Company, Messrs. Cosgriff, Boyer and others in the matter of improving our wool product. I can only add that the work they have done and with which you are familiar that in certain instances and localities where it is not practical nor desirable and where the

clips are not large enough to warrant extreme classification of wools, that shepherds can at least erect better wool sheds and can grade their wools at the shearing sheds. They can erect local sheds at railroad shipping points to protect wool from storms instead of allowing the same to absorb moisture from the ground to its ultimate great detriment, and in many small ways can and should give attention to the betterment of their product.

General Conditions.

I believe that most of our woolgrowers have awakened to the fact that no animal responds so profitably to kindly care as does the good old ewe. For every dollar spent in protection and in feed she will give you two. I have often heard it commented on and have been asked why it is that the woolgrowers of Idaho usually produce so much better stuff and get better prices than adjoining and other states. My uniform reply has been because they give their flocks better care on the range, use better bucks and in every manner treat the wool growing industry as their principal business instead of looking upon it as a side issue which will take care of itself.

There is a great necessity for more care in the breeding of sheep and, further, a need of breeding with more definite ideas in view regarding what we are trying to produce and what the ultimate outcome will be. For this reason I think we should be strong believers in the necessity for the estabishment of public ram sales. sider that the unfortunate circumstances which deprived us of the splendid ram sale, of which we were assured here in Salt Lake City last summer, was a great misfortune to the industry. It would have been an education in itself and I trust that the association will not allow the present year to go by without holding such a sale. Our flocks can easily be made to yield more wool, if we are wool producers, and more mutton, if we are lamb growers, and I am sure can be made to produce more of both at one and the same time. I trust the Committee on Resolutions will direct the

Secretary of this association to inaugurate and again arrange for a ram sale during the coming season.

Conclusion.

In conclusion I desire to extend to the association and to the members and those absent my sincere thanks for the honor which during the past year and years prior you have reposed in me as your president. I wish especially to thank those among you who have ever been ready with their time, their brains and their means to come to the assistance of the organization. You have many men among you of whom we can be justly proud, men to whom you are greatly indebted, and to these men, in my own behalf as a woolgrower and also in your behalf, I now desire to extend heartfelt and grateful thanks. I feel that the time is ripe that a little new blood in your executive organization would perhaps invoke new interest in your affairs. It is with regret that I at this time lay down permanently the pleasant burden which it has been my good fortune to carry for the past few years, and I am sure that you will select someone as your president in my place who will bring your association to a higher and broader outlook and more fertile effort, and I can assure you that you will find me in the ranks working as hard as anyone to help him do so.

CONDITIONS AROUND OWEN, WYOMING

I don't think we ever had a nicer fall and winter than we have had up to the present time. We have just had enough snow for sheep to do well on. All sheep started in the winter in good shape, and the range was never better, if as good, than now. The summer was good, and the lambs weighed out well. Most of them sold for 6½ cents a pound and a few seventy-five-pound lambs brought 7 cents. Some of the yards are empty this winter on account of scarcity of sheep and lambs and also on account of the price.

There was some cottonseed cake fed here last winter, but on account of the advance in price there is not any

one feeding it this winter. Hay is now selling for \$6.00 a ton in the stack, but the feeders paid \$4.50 and \$5.00 a ton last fall.

The losses do not seem to be as great from coyotes as they were a few years back, I am glad to say. There is a great deal of trapping being done.

It looks now as if there would be a good wool clip from the few sheep that are now being run in this part of Wyoming. The settler is crowding the sheep out pretty well, but from what I see in the Wool Grower, it is about the same everywhere. There are about half the number of sheep on the range here as there were five years ago. Can't tell what the next five years will bring, but it looks as though it would bring the sheep business to a close.

I read the National Wool Grower from cover to cover.

JAKE BLANKENSHIP, Wyoming.

THE WOOL CLIP IN NEW ZEALAND.

(Consul General Alfred A. Winslow, Auckland, Nov. 5.)

The wool clip of 1915 in New Zealand promises an average yield if it can be clipped in time. There is a shortage of sheep shearers and the price of shearing has advanced from \$4.86 per 100 head (the official scale rate) to \$5.46, offered by many of the owners of herds of sheep in order to get the work done in season. The sheep industry is prospering in this Dominion and the yield of wool is estimated at 575,000 bales for 1915 against 560,000 bales for 1914, and the export of frozen mutton and lamb has exceeded any previous year.

The New Zealand woolen mills are expected to consume about 20,000 bales, against 14,000 for last year, leaving 555,000 bales for export. Quite a large portion of the home consumption will be put into uniform material. Some of the woolen mills are working overtime, and more will do so if efficient operators can be found.

If you do not pay your dues no one will pay them for you.

the

Co

the

my

ex

bee

rie

ot

sti

to

Ze

of ot

in

ha

th

UNITED STATES DET AILED ESTIMATES OF WOOL PRODUCTION BY STATES.

STATES.	Fleeces (000 omitted).		Weight Per Fleece.		Wool Production. (000 omitted.)	
	1914.	1915.	1914.	1915.	1914.	1915.
	Number.	Number.	Pounds.	Pounds.	Pounds.	Pounds.
Maine	149	148	6.1	6.3	906	932
New Hampshire	32	31	6.2	6.3	201	195
Vermont	88	83	6.5	7.1	571	589
Massachusetts	21	20	6.2	6.4	131	128
Rhode Island	The Total	0000 500	5.0	5.0	30	2
Connecticut	550	535	5.5	5.5	82	8
New Jersey	18	17	6.3 5.5	6.5 5.6	3,464	3,478
Pennsylvania	671	650	5.9	6.2	3,959	4.03
Delaware	5	5	5.4	5.7	26	2,030
Maryland	126	127	6.0	5.9	755	749
West Virginia	668	681	5.1	5.0	3,406	3,40
Centucky	775	725	4.7	4.9	3,643	3,552
Ohio	2,098	2,110	6.6	6.8	13,844	14,350
Michigan	1,191	1,170	6.8	6.9	8,098	8,07
Indiana	775	725	6.4	6.8	4,961	4,920
Illinois	550	530	7.0	7.5	3,853	3,97
Wisconsin	568	550	7.1	7.2	4,031	3,960
Iowa	422 709	420 720	7.4	7.0	3,124	2,940
Missouri	1,071	1,050	6.7	7.5 6.7	5,319 7,179	7,03
	10,508	10,217	6.44	6.65	TO PROGRAM	
	E 20 10 10 10 10 10 10 10 10 10 10 10 10 10	A 1 1201	7 F972 F132	TOWN CONTRACTOR	67,680	67,94
Virginia	430	439	4.6	4.7	1,978	2,06
North Carolina	28	145	3.9	3.9	550	56
Georgia		200	2.8	2.6	109 580	110 520
Florida		107	3.1	3.1	325	33
Alabama	108	106	3.8	3.8	411	40
Mississippi	148	155	3.6	3.4	533	52
Louisiana	140	145	4.0	3.7	560	53
Arkansas	10 (31 90	90	4.5	4.5	406	40
Tennessee	465	435	4.2	4.4	1,953	1,91
	1,862	1,851	3.98	3.99	7,405	7,38
Kansas	200	205	7.0	7.1	1,403	1,45
Nebraska	235 479	500	7.6	7.4	1,789	1,77
North Dakota		225	7.4	7.0	3,547	3,50
Montana	3,869	3,725	7.8	7.7	30,177	1,62 28,68
Wyoming	3,560	3,630	8.0	8.0	28,476	29,04
Idaho	1,896	1,935	7.8	7.9	14,792	15,28
Washington	455	460	8.0	8.3	3,638	3.81
Oregon	1,970	1,950	8.0	8.0	15,763	15,60
California	1,852	1,900	6.2	6.1	11,480	11,59
Nevada		765	7.4	7.7	5,502	5,89
Utah	1,770 1,317	1,800	7.4	7.4	13,100	13,32
Arizona	850	1,250	5.4	6.0	7,111	7,50
New Mexico.	3,233	3,325	6.5	6.3 5.6	5,521 19,077	5,98 18,62
Texas	1,490	1,600	5.8	5.8	8,643	9,28
Oklahoma	70	bra 70	5.9	7.0	411	49
risv sichrang yng ha	24,214	24,530	7.11	7.11	172,107	173,48
UNITED STATES	36,584	36,598	6.76	6.80	247.192	248.77

VERY SATISFACTORY.

I feel mighty guilty that I have neglected to pay my dues to the National before now, but I am enclosing \$10.00, five of which is my dues and the balance is a donation.

Condition here in Coconino county, Arizona, on the winter range are not the best, owing to lack of water—feed in a general way is good. One thing in our favor is the mild winter so far. We need more snow.

HARLOW YEAGU, Arizona.

FROM REPORT OF SECRETARY OF AGRICULTURE

"An important factor in connection with the country's meat supply is the public grazing domain. The lands outside of the National Forests, of which there are about 280,000,000 acres, are not supporting the number of meatproducing animals they should. In the absence of any control by the government these lands have been overgrazed. That they can be restored to their former usefulness is proved by what has been accomplished on the National Forests and in Texas. On the Forests under regulated grazing the

DO IT NOW!

On January first each year the dues of every member of the National Wool Growers' Association are due. These dues amount to only \$5.00 per year, and \$1.00 of this goes to pay your subscription to the National Wool Grower. Every Western sheepman can afford to pay \$5.00 and we urge him to forward this amount at once.

number of stock has been increased 50 per cent. Practically the same increase has been secured in Texas under its leasing system. There should be a classification of the remaining lands at the earliest possible date to determine their character and to secure information upon which to base plans for their future improvement and use and for the distribution among settlers of those portions upon which it is possible to establish homes."

All dues are payable January 1. Let us not forget this.

Address, My Observations In Australia

By Prof. F. R. MARSHALL, Washington, D. C.

In the fall of 1914 I spent six weeks in Australia. The primary object of the trip to that part of the world was to purchase sheep provided for in the terms of the appropriation made by Congress in response to the request of the National Wool Growers Association. I would therefore like to avail myself of this opportunity of briefly explaining to the association what has been done in using the appropriation.

The Corriedale Importation.

While it was the importation of Corriedales that was chiefly in mind when the appropriation was secured, there was no hindrance to securing sheep of other breeds if desired. The quarantine regulations in regard to importations from Australia were and still are very strict, and on account of this fact it was considered desirable to make the importation from New Zealand. It was apparent also that the full amount available would be needed to establish a fair sized breeding flock of Corriedales and consequently no other sheep were imported.

The appropriation was sufficient to import sixty-five ewes of breeding age and seven rams. The highest price paid was \$250 for one ram, and ewes were bought at prices varying from \$25 to \$125. The prices paid were perhaps a little higher on the average than private individuals would care to pay. The New Zealand breeders were not accustomed to selling ewes, and it was only after some considerable discussion that it was possible to make a pick of their flocks. The sheep imported reached the Bureau of Animal Industry's experimental headquarters at Laramie last May. Since that time they have been running upon the range except during the breeding season when they were penned with single rams as is necessary in our breeding experiments. One point of doubt regarding these sheep was readily cleared up when they were turned into the band. It was found that they staved in the band as well as did the Merinos and gave no trouble whatever in herd-

ing. The sheep were all machine shorn last June and next year's shearing will give a fair test as to the amount and quality of wool Corriedales will grow under Wyoming range conditions. It should hardly be expected, however, that these sheep that were raised under conditions furnishing much better feed than is found on the Laramie plains should show to best advantage. The first crop of lambs grown in this country will furnish the best possible test.

Two hundred and eighty head of first cross ewes are also being bred to the



PROF. F. R. MARSHALL.

Corriedale rams. Some of these together with their lambs will be run on different types of country next year, and these lambs marketed to afford a comparison on the market of the get of the Corriedale rams with rams of other breeds. The Corriedale is still a new thing in New Zealand, though it appears to be gaining ground quite rapidly. One-twenty fifth of the flocks entered in the registry volumn of the South Island Sheep Breeders' Associ-

ation are Corriedales. These flocks include a total of about 11,000 ewes, or one-eighth of the entire number of all breeds in the book for that year.

I do not think it necessary that I should occupy your time further on this topic, as the character of the sheep and the plan of the experiment are quite generally understood. While next season's results will furnish considerable information as to the value of the breed in this country, it will be a year or two more before their value to western sheepmen can be fully understood.

In Fremont county, Idaho, a tract of 28,000 acres of government land has been withdrawn from entry in order that it amy be used by the Bureau of Animal Industry to carry sheep used in its experiments in breeding, grazing and management. When this ranch is equipped the Corriedales will be transferred to it. The Rambouillet breeding will be continued and experiments added on a scale to secure for the range sheep raiser answers to questions regarding types of sheep, methods of using the range, etc.

Conditions in Australia.

Six weeks is too short a time to make anything like a full study of the sheep industry in Australia. It is not possible to cover anything like as much ground as one could get over in that time in this country. Australia is about as large as the United States and there are no transcontinental railways. The main lines run between the large cities on the east and southern coasts. By side trips from these lines it is possible to visit some representative sections, but the interior or back country can only be seen by spending much more time than was at our disposal.

I think it in no way disparaging to the American sheep raiser to say that the sheep industry in Australia is upon a more permanent basis and on a whole better conducted. The natural conditions of the country render this possible. The governments have recognized the importance of sheep raising in their land policies, and these policies have been in effect with the first settlement of the country. These land policies are not adopted by the general government but by the state governments. Each of the five states into which Australia is divided has its own plan of controlling its lands, and while the states differ in their regulations, they are in the main very similar. There is no open or free range. New country farthest from the railroads is entered upon by sheepmen under a long term lease. These new areas are leased for long periods and at low rates. For example, in Queensland, during the year ending June 30, 1912, leases were granted for 348 grazing homesteads, averaging 11,000 acres, at an average annual rental of 1 5-8 cents per acre. In June, 1913, the state of New South Wales had outstanding leases to the number of 60,242, comprising 124,361,637 acres, for which the average annual rental paid was 2 1-3 cents per acre. In other sections these rates are higher and in some cases based upon the value of the land as set by a board of appraisers. Ten years is the minimum duration of a grazing lease, and many of them are granted for thirty years. Many of the larger concerns own their lands, though this is not always considered desirable. In 1913 there were in New South Wales eighty-six owned holdings of over 50,-000 acres each. Very few government lands have been sold to private parties at less than \$5 per acre, and at times owners of large tracts may be required to sell to the government parts of their land to be divided up for farmers. In my estimation the conditions upon which the Australian pastoralist controls his range is responsible for the main difference between sheep raising in that country and in the United States.

Climate and Management.

The climate also makes the sheep business very different from what it is in this country. The winters are comparatively very mild, but in some sections the heat of summer is a serious consideration. The seasons, however, do not call for change of pasture and

STATE UNIVERSITY USRAED

the sheep remain in the same locality throughout the year. This climatic advantage, together with the permanent tenure of the land, makes possible the fencing or paddock system. The so-called "sheep runs" are divided into fenced pastures varying from 500 to over 10,000 acres, depending upon the character of the land and the size of the business. Sheep run at liberty in these paddocks and need to be rounded up only a few times during the year. The stockmen say that in a large pasture the sheep divide themselves up into groups each of which keeps to the same part of the pasture. One boundary rider is ordinarily sufficient to keep track of the sheep in two or three paddocks, 20,000 to 30,000 head. He also tends to the fences and ordinarily has considerable time for digging out rabbit holes and trapping foxes or dingoes. These predatory animals are much less numerous and troublesome than in this country. Owing to the favorable weather and the scarcity of predatory animals, no great amount of extra labor is required at lambing time as the sheep continue to run loose during that period.

The manager of a ranch or station practically always lives upon the property, and he is at all times in touch with his boundary riders and through them with the conditions of the flock. At shearing and breeding times he is quite busy, though a good many of them appear to have considerable leisure for horse racing and other sports.

Many of the ranches near the coast and in the earlier settled parts carry as high as one sheep per acre throughout the year. The first ranch visited in New South Wales comprises 156,-000 acres and was carrying at that time 138,000 sheep and young lambs, 6,000 cattle and the necessary work horses. Included in this number of sheep there were about 21,000 head of wethers from two to six years of age. The practice of keeping old wethers, however, seems to be rapidly dying out. In the interior parts of Queensland, where wool is the main consideration, there are still considerable numbers of wethers, which may reach

the market any time after four years of age. Some of them are bought by farmers or smaller ranchmen to be grazed on better lands before shipping. There are many places in the interior and drier parts of the country where from three to five acres per sheep are required. Even in these areas, however, fencing is practical because one pasture area suffices for the whole year.

On most of the stations a stud flock is kept in separate paddocks to breed rams for use in the main flocks. With this system the owners can afford to pay the higher prices for rams which we read of because they are buying the sires of their flock rams. The annual ram sales at Sydney are the main event of the year in the sheep business, and are regarded as much more important than the shows. Some flock rams are included in these auctions and the total number sold in July, 1915, was about 2,000 Merinos and over 1,000 of mutton breeds.

Type of Sheep.

One of the most interesting aspects of the Australian sheep industry is the change in the type of sheep bred for wool production. Australia still has as many unmixed Merinos as there are of all kinds of sheep in the United States. One hears on all sides talk of "bold," "robust" Merino wool. This robust wool is what we would call coarse for a Merino. It grows much longer, however, than the finer quality, and its popularity is based upon the fact that with this kind of wool and with the kind of sheep that grows it, it is possible to secure a greater return in wool from an acre of land than with the smaller sheep producing finer wool. There seems to be little inclination to preserve the stock that produced the very fine qualities of wools that formerly made the Tasmania breeding stock so popular and high priced. Certainly it is easier to-secure increased length of wool by sacrificing some in fineness. So far the loss in fineness has not reduced the price. In fact, during the last year or so the stronger wools have been much more sought for. Many of the Australian sheepmen, however, argue that the growing of this stronger wool is more profitable even though it should sell below the finer wools. In the first place it is a lighter shrinking wool, and the actual weight of clean wool is greater per sheep or per acre than with the smaller type more heavily folded and carrying more oil. The larger sheep with less grease and a plainer body has a stronger constitution and is less subject to loss in drought times.

Another point on which they differ very materially from our breeders of fine wooled sheep is in their preference for an open face. Wool below the eyes is not considered as necessary in getting as heavy fleece and is objected to because the sheep are harder to handle when they cannot see plainly. Especially in the timbered pastures of many parts of the country a wooly face is objected to as such rams would never find their way to water.

There does not seem to have been any particular effort to produce a better mutton carcass upon this class of sheep. It is only within recent years that any number of Australian sheep raisers have been seriously interested in the mutton market. In the older settled parts of Australia the sheepmen are changing quite rapidly to the raising of cross-breds. Lincolns and English and Border Leicesters are mainly used. There are no Cotswolds, and Hampshires are little known. Rams of the down breeds are popular where there is assurance of feed to make lambs fit to ship. Where they are likely to need to be carried over the long wooled blood is preferred on account of weight in both fleece and carcass. The Corriedale has been taken to Australia and appears to be gaining ground. With meat trade conditions as they seem likely to continue, there is no doubt that Australian raisers will continue to produce more and more mutton and less Merino wool. I cannot see, however, how their mutton production can take rank with that of New Zealand, as their pastures in the main are much drier and shipping facilities are quite poor. It also seems likely to be a long time before grain

growing will be sufficiently general to give any great quantity of feed for fattening sheep. Consequently their main mutton output is likely to consist more largely of the heavier and older grass fed stuff, though in the better sections there is a growing business in breeding for lambs to be marketed at weaning time. Not all Australian sheep are highly bred up. This is shown by the quantity of low grade wools shipped to this country since the removal of the tariff.

Shearing and Wool Selling.

Wool is today the main dependence of Australian flock owners. Their clips enjoy a high reputation in the world's trade. I judge that they produce more Merino wool of combing length than any other country. I am now convinced that the reputation of their wool is based less upon their strength and spinning qualities than upon the way they show up in the grease. This attractive condition in the unscoured state is due, first, largely to a comparatively lighter shrinkage, and secondly, to the way they are put up. The first is due to the country and the breeding of the sheep, the second to the efforts of the men who own the sheep and sell the wool.

Practically all of their clips need to be exported. They found it desirable and profitable to go to considerable expense in getting their wool upon the market in a way that suited the world's buyers who came to their sales. With settled conditions in the use of their range it was safe to make long time investments in good stock and in shearing sheds.

The more elaborate sheds and the way they are conducted is not an essential part of the preparation of the wool clip, but it is worth while for convenience and economy of labor in the shearing itself.

I do not believe it necessary that I should go into detail as to the work done upon the fleeces at the shearing shed. The practice of skirting and classing is fully established in all the wool producing areas of Australia and believed to be necessary for the best financial returns. Their method of

putting up the wool is also a necessity in making it possible for the breeder to keep track of the weight and value of wool from sheep of different kinds as he has them classed in the paddocks and from flocks of different lines of breeding.

One main advantage claimed for having the bellies and heavier parts of the skirts sold separately from the body of the fleeces is that it enables the buyer to estimate much more closely on shrinkage. This can readily be recognized when we consider that bellies of Merino fleeces frequently shrink 8 per cent more than do the bodies of the fleeces. I am told that American buyers who operate in the Australian market are expected to estimate shrinkage very much more closely than those buying entire ungraded clips of unskirted fleeces in this country. Aside from the removal of the belly the skirting is often very light, especially on Merino fleeces, while on cross-breds where there is less of uniformity it is usually desirable to go deeper into the britch to remove the coarser qualities of wool. There is probably a considerable difference in the demands of the buyers representing European mills in Australia from those representing American mills. At any rate the classing and skirting of the fleeces as done there not only enables the buyer to estimate very closely on shrink but also makes it possible for him to buy a line of wool all of which will be suitable for a certain limited class of fabric upon which his particular mill may specialize, or for which it may have accepted orders. Even though the financial value of the main parts were solely given to the breeding and handling of the sheep it would be worth while to do it, but I am inclined to think that with their systems of selling and the custom that has grown up in their buyers it is a direct financial advantage in selling. least this would seem to be so in view of the fact that some classers, between shearing seasons, and others who operate around the sales rooms, make a practice of buying small clips that are badly classed or poorly skirted and of

er

to

ra

th

ta

st

reworking them and putting them together to be resold later.

In discussing this plan of handling wool in Australia it must be remembered that clips are never sold as a whole, and that a clip can be sold in as many different lots as is desired. It is considered preferable, however, to have as few lots as possible, though this is not carried to the extent of allowing tender or exceptionally greasy wool to go in with better fleeces, as the buyer would be practically certain to value the whole bale or the offering which it represented on the basis of the lowest valued fleeces which he found.

An idea of the cost of the extra labor expended on the wool can be gained from the fact that the larger companies that shear by contract ordinarily have a common rate of 12 cents per head for doing all the work from the time the sheep are put in the pens until the wool is delivered in the bales. The shearers in the employ of these contractors receive 6 cents per sheep, so that the entire cost of handling the wool runs around 6 cents per head. This figure must be reduced by the subtraction of proportion of charge going into wages of bosses and mechanics.

Some of the large clips are sent direct to England to be sold there, though most of them are sold in some of the larger cities. There is practically no selling at home. The larger selling agencies at the seaport towns receive wools and make advances when desired. It rests with them, as I understand it, to say what clips or what part of a consignor's clip shall go into any particular sale. It is not attempted to get the wool into the hands of the manufacturers all at one time, as each house is limited in the amount it can offer in each sale and the sales are distributed over a considerable part of the year. In this way the selling agencies with good financial connections appear to finance the getting of the wool from growers to manufacturer, as do the eastern houses in this country, except that there the middlemen are mainly agents who work for percentage com-

mission, while with us the commission sellers are in the minority.

While there is great uniformity in the work of the various classers who work at the sheds it must not be understood that their preparation permits future contracts in wool by named grades or classes. With a product of over 50 per cent shrinkage I do not believe that such will ever be possible, though economists seem to agree that where possible, future trading operates to the advantage of all concerned.

You naturally ask, will their system of preparing wool work in this country? I do not know and I doubt very much if any one else knows for sure. It would work if we had their system of selling, but I doubt if we ever shall have that. It is very desirable that American wool growers should now go just as far as they can in improving shearing sheds and preparation of their clips. In my judgment careful grading is the least that can be done, though I doubt if this will be long continued if clips are sold entire as they must be when sold at home.

Marketing Sheep.

I do not think that American sheep raisers would be interested in adopting any of the practices that prevail in Australia in the marketing of sheep. The Australian sheep raiser is in the midst of the worst of troubles with transportation affairs. Their supply of stock cars, the irregularities of furnishing them, and very slow rate of running are serious handicaps to the sheep industry. The lack of facilities for feeding in transit are especially serious when sheep have to travel long distances. Their slaughtering points are more widely distributed than in this country, however, and outside of packing centers there are sales yards and periodic auction days where a great many sheep are sold to killers and reshipped for slaughtering. In the larger stock yards at such places as Melbourne and Sydney they still adhere to the plan of selling all stock by auction at a fair rate per head. There are commonly seven or eight persons bidding upon the same lot, and so far as one can judge or hear competition

seems to be strong. They usually sell sheep on only two days each week on the same market. On September 22, 1914, the Sydney market had 44,000 head consigned by 126 owners. Crossbred wethers sold as high as \$6 per head, ewes up to \$4 each and lambs from \$2.50 to \$4.50.

In October after the 1914 drought had become serious I saw one lot of several carlaods of exceedingly nice Merino lambs just weaned sold for 75 cents per head. No one had feed to take them to and they were not ready to kill. On the same day fat ewes weighing better than 150 pounds were selling at \$5.25 per head. Prices for fat stock have been rising very rapidly in Australia, though it is hard to get a fair idea of the change owing to the influence of last year's drought and the war demand.

I am not sure whether it is true in Australia, but in New Zealand any farmer has the opportunity of having his stock slaughtered, shipped, and sold in England on his account and returns made for each consignor's lot, whether it consists of half a dozen head or as many carloads. Comparatively few stock or feeder sheep are sold through the sales yards at the larger points. Some are bought directly off the ranches, and the most are sold in the country sales yards.

Labor and Wages.

In regard to labor and wages American sheep raisers need not be envious of those in Australia. There shearers and shed hands are mainly organized, and this fact has its advantages as well as disadvantages. Some owners say they would rather deal with an accredited representative of the crews than to have to attempt to engage their men separately. In a great many localities it would be impossible for an individual owner to get together the required number of men. Troubles have been very serious and agreements have been reached as to the payment and working conditions of the different classes of laborers at the shearing sheds. That arrangement seems to be working very smoothly, though in every system there must be some conflict and need for re-

ON HAY IN IDAHO.

adjustment. More recently the Australian has a serious concern in the government's extension of the wage scale to all regulated classes of farm and ranch labor. It is difficult to see how this can be made to apply, and is certainly causing considerable expense to stockmen.

Probable Future Supplies.

In a good many of the older and more settled sections that are still used for sheep an increasing amount of land is being taken up for farming and dairying. This has tended to reduce the number of sheep which probably so far has been counterbalanced by the occupation of newer lands in the interior. This extension of the industry has about reached its limits with the present transportation facilities, and there seems to be very small prospect of any considerable addition to the railway mileage for some time. This newer country is also much poorer in character than that from which sheep are being displaced by farming. In fact Mr. Pearse of the Pastoral Review states that the land that is being taken over for dairying has supported three sheep to the acre, while the newer lands require three acres per sheep. In consideration of these conditions I see no prospect for a very marked increase in Australia's output in the near future.

With our home market in this country for meat products, and with the almost certain values for wool that the imminent world's shortage should bring about, it would seem to me that the main concern of the western sheepman at this time is to secure some form of administration of grazing lands that will give him fair certainty of tenure and assurance of safety in investing and building up his business. If we can get right on the land question and give the western sheepman a chance to establish and conduct his business as he can and would like to do, I feel certain that it will not be long before the sheep industry of these states will furnish lessons to Australia or any other

Do not forget to pay your dues.

A visit to Idaho early in the year shows the sheepmen of that state have made ample preparation for winter. Nearly all of their sheep are being fed hay, and in addition, a few are getting grain. About four inches of snow covers the state in most parts but the weather is good. Hay has cost from \$5.50 to \$10.00 per ton.

More Idaho ewes are bred to lamb in February than ever before, probably twice as many as last year. Some Idaho sheepmen fear a glut of the early lamb market, but this can easily be avoided by judicious shipping. The sheepmen in Idaho have learned that by lambing in winter the percentage of lambs dropped, as well as the number saved is greatly in excess of what can be expected from May lambing under the most favorable circumstances. This is simply because no one attempts lambing in the winter without being prepared for it, and every one attempts summer lambing, without being prepared. It is almost as dangerous to have lambs dropped in the late spring as it is in February, but most Idaho breeders have solved this problem to their own satisfaction, and we do not expect to see them go back to spring lambing, especially since some of them have made 100 per cent in winter sheds.

One complaint in Idaho is the bad deal they have received at the hands of certain cottonseed cake dealers. In many cases this cake was ordered for December 1st, and there is no sign of its delivery yet or any assurance when it will be, while cake that was ordered at a later period and at a higher price, has been delivered. The Idaho sheepmen are making arrangements to institute suits for damage, and we anticipate they will have no trouble in collecting.

It is estimated that the farmers on the Twin Falls tract purchased around 100,000 old ewes that were no longer fit for range service. These ewes are all bred early, but many of them are in the hands of men who have had no experience with sheep, and a big lambing is not to be expected. We think

that the National Wool Growers' Association would be doing a nice thing if it would send an experienced man into the Twin Falls country to explain how these ewes had best be handled at lambing time, and we shall endeavor to send such a man.

The sheep business in Idaho is on a better basis than in any other state, except Washington. Flock owners of that state are caring for their flocks; they are producing the best lambs in the country, and have eliminated the danger of big losses. Other states can well afford to pattern after Idaho in this particular.

SAFEST TO EAT MUTTON.

Washington.—The disease known as trichinosis, which may result from eating raw pork, is caused by certain roundworms, called trichinae. These are miscroscopic in size and infest the flesh of hogs. The prevalence of trichinae in hogs is indicated by the fact that during nine years, 1898-1906, when the carcasses of hogs were inspected microscopically by Federal inspectors, of 8,0000,000 carcasses so inspected, 1.41 per cent contained living trichinae and 1.16 per cent contained trichinalike bodies or disintegrating trichinae. In other words and in round numbers, trichinae were present in one out of 71 hogs, and if the presence of dead trichinae and trichina-like bodies is included, in one out of every 39 hogs.

SAVE MORE LAMBS.

Mr. Thomas Boylan of Rock River, Wyoming, has prepared a small booklet on "Total Per Cent Lambing Rules." The author has had long experience in lambing sheep under range conditions and in his booklet gives the benefit of his observation to those who wish to improve their methods. Beyond a doubt this little book could be read with profit by many Western sheepmen and as it sells for only 50 cents, all can afford to have it. We suggest that those who desire this booklet write direct to Mr. Boylan for it.

Jan

m

bu

bu

pr

al

aı

m

of

th

g

-tı

h

10

11

S

THE BUTTERFIELD STOCK FARM.

The Butterfield Livestock Company at Weiser, Idaho, is generally known as raisers of sheep. Its flocks of Hampshires, Rambouillets and Lincoln sheep are well known to western people. In addition to the sheep the Butterfield company maintains a well balanced stock farm, consisting of Holstein cattle, Shire horses, and a large number of hogs. They have about twelve head of registered Shire mares, and two stallions. They are a very good lot, and were purchased some years ago from the Baldwin Sheep Company of Hay Creek, Oregon. Some of these Shires were imported from England by the Baldwin people, and they, with their increase, make up the stud. These Shires are not pampered, but are expected to do their share of the work on the farm, in addition to raising colts. They are very excellent horses, and a great credit to any farm. We do not anticipate that Henry Ford's farm tractor will lessen the demand for this kind of horses.

In addition to the sheep and horses, the Butterfield people maintain a herd of fifty Holstein cows. These cows are milked with machines and the milk is peddled out in the city of Weiser. The dairy is kept in good condition and we are told it is a paying proposition.

At the present time the Butterfield company is fattening 412 head of hogs. These hogs are being fed home raised corn, crushed wheat and tankage. They are weighed from time to time and show a gain of 2½ pounds per day.

Some years ago Mr. Butterfield started to raise corn, and this year had in about 140 acres. Some of it yielded 75 bushels per acre, but this yield has been exceeded in earlier years. This corn is of the Yellow Dent variety, and is planted early and cultivated three or four times, according to the season. Last fall two silos were built by Mr. Butterfield, each having a capacity of 70 tons. The contents of one silo is now being fed to the dairy cows, while the other will be fed to the ewes when

they begin lambing. This silage in moderate amounts will prove a valuable addition to their rations, and result in more growthy lambs.

Many years ago the Butterfield people seeded several irrigated pastures to mixed grasses. These pastures were used for ewes and lambs, both early and late in the season. However, it has been the experience of these people that they can make a bigger and more rugged lamb in the high mountain ranges, than on these pastures therefore, for several years these pastures have not been used as much as formerly. Practically every acre of this pasture has been plowed up and will be seeded to alfalfa in the spring, and Mr. Butterfield will depend upon the mountain range for the future. At the time of writing this about four inches of snow covered the ground around Weiser, and the Butterfield sheep are on feed, alfalfa, hay, barley, or cotton seed cake, forming the rations. They are not being pampered, however, but are kept in a thrifty condition as befits sheep of this class.

RESOLUTIONS OF IDAHO FOREST USERS

Believing that the principles of deferred and rotation grazing are correct, both in theory and practice, and that in order to secure the highest of production of forage and utilization of forage resources, we think it advisable for allotments generally to work out and put into effect such a system at as early a date as possible.

In view of the heavy losses incurred by the woolgrowers in the national forests from predatory animals each season, it is recommended that the woolgrowers in each forest make a systematic effort at the end of the grazing season in 1916, in co-operation with the biological survey and forest service, with respect to the destruction of such predatory animals by poisoning national forest ranges. It is recommended that the woolgrowers furnish the bait and men necessary to do the work; that the biological survey furnish all the necessary poison, and

that the forest service supervise the work. It is recommended that each local woolgrowers' association take this matter up at an early date, in order to perfect methods to raise the necessary funds, and that, in the absence of local associations, the forest supervisor take the matter up with each permittee in each forest.

NEW YEARS RESOLUTIONS FOR A SHEEPMAN

- 1. I will pay my dues promptly to my State Wool Growers Association and to the National Wool Growers Association.
- 2. I will take an interest in the National Wool Grower and use every effort to obtain new subscribers for it.
- 3. In grazing upon the public domain and National Forest I shall use every effort to protect the range from injury so that those who come after me shall have a fair show.
- 4. I will respect the range rights of farmers, cattlemen and other sheepmen, believing that they will do the same by me.
- 5. I will put my wool up in an honest, careful manner and sell it for exactly what it is.
- 6. I will not ask my neighbor to destroy more than his share of coyotes, but I will do my part.

THE WINTER IN UINTA COUNTY, WYOMING

The winter in Uinta county, Wyoming, from the rangeman's standpoint has been ideally perfect, mild and not too much snow. It is one of those magnificent winters of which Wyoming is capable with nothing to retard the growth of wool or reduce the condition of sheep.

The prospect for the 1916 clip is that it will fully equal that of 1915, which was our banner year to date.

Very few sheep are being fed. Hay is scarce, \$9.00 to \$10.00 a ton in the stack. Bounty has been paid on 700 covotes.

GEORGE A. MYERS, Wyoming.

Address, Methods of Handling Sheep in California

By F. A. ELLENWOOD, Red Bluff, California.

BEFORE going into details I want to say to you that I do not know of a single place in all California where the improvements, the equipment, and the administration of a sheep business are all just as they should be; but we are progressing slowly, and to prove this I shall tell you something about the early days of sheep breeding and management in California. You may think I refer to the pioneer days of '49 but we will go back far-

of '49, but we will go back farther than that. Many think that gold mining is the oldest industry in California, but the shepherds were here with their flocks long before gold was discovered in California. To be exact, the shepherds came in 1773, or 75 years before gold was discovered.

Their methods were similar to those in the old country as the story is told in the Bible. -In herding, each owner's flock was camped all together at night. Each morning one shepherd would start out ahead calling his flock. After he had about 1,000 head perhaps following him, another shepherd would shut the gate and wait until the first one had gone a short ways with his portion of the flock, then he would open the gate, lead another portion in another direction, the third shepherd, if there were about 3000 in the flock, keeping the gate meanwhile, and after waiting a suitable time would start out in still an-

other direction, leading the remainder of the flock. Each one tended his flock in the daytime and all three would come back to the same place again at night to camp.

If one man's flock became mixed with a neighbor's, they were separated by throwing the lariat in the same way as for cattle. Or if they wished to shear the rope was used for catching the sheep and the shade of a tree sufficed for a shearing shed. These methods were in vogue until about 1860 when California had about one million sheep. Shepherds from eastern states began to engage in the business then and herders were put out in a camp alone and each flock kept separate at night. Camp tenders were employed to look after the herders. Someone now discovered that two bands could be separated by running them one at a time through a chute



F. A. ELLENWOOD

with a dodge gate at one end. Large corrals were built for shearing and ten or twelve men would get in one pen together, called a "bull pen," to shear the sheep.

Up until about 1870 sheep were handled in the above manner and very much the same over all portions of California where there were sheep, although they were only kept in the larger valleys at this time. About this time also they began in some portions of the state to drive to and from the moun-

tains.

From now on different sections of the state followed various customs. In most of Sonoma, Humboldt and Mendocino counties, sheep run loose in large pastures the year round, without any herder even in lambing time and often without changing from one field to another; in this section the spring lambs are all sheared in July on account of the dry grass seeds working through

the wool into the skin. In central California thousands of head of sheep are driven into the tules along the Sacramento River for summer grazing. Most of the sheep, however, are driven to the mountains for summer grazing where I shall begin to tell you how we do things in our camp.

Summer Management.

Our summer range is located nearly one hundred miles from our winter range with much of the intervening country fenced, which necessitates driving over country roads, or what is worse, the Pacific Highway where there is so much auto travel. This being the case we never drive over two thousand or twenty-three hundred in one band. When on the road we always have two or three men with each band, besides one with the pack train or wagon as the case may be. It requires about 17 days to make the trip up in the spring with the

young lambs. After reaching the summer range each band has a herder with a burro, and a camptender with saddle horse and pack mule. The herder camps sometimes at their main camp which is changed about every eight days, or he takes his bed and some provisions, with a light camp outfit, on a burro, and lets the sheep camp almost anywhere they choose, never bedding them more than three nights in one place.

By the first week in July we ship

Jan

old

but

In

ing,

ject

abo

I

mu

WOO

cau

sub

Gro

eve

tha

col

er

Gro

the

the

we

ing

wh

far

ing

C111

qui

wh

exp

tol

ber

lar

the

pa

lit

th

th

th

by

of

th

ea

ne

61

se

n

about 50 per cent of our lambs that are for sale, the remainder going about the first of August. After the mutton lambs are all shipped, we shear the ewe lambs that have been kept, as well as the old culls, and ship them all by rail to Red Bluff. Here they are put on grain stubble or alfalfa pasture till about December 1st, when the ewe lambs are taken to the winter range, and the culls to the feed lot.

In August the ewes, being high grade Merinos, are all sorted for breeding purposes as we breed one-half, including all the lightest shearing ones, to purebred blackfaced rams, either Shrop or Hampshire. The other half which has been selected as the heaviest shearers, has been bred to Lincolns and Romneys the past few years, but in the future these will be bred to Corriedales and part of them were this year. Our breeding season commences about September 25th. About the middle of October the sheep are started towards the winter range again arriving there about November 1st. In November the ewes are all tagged to give the lamb a better chance when it arrives and to prevent flyblows before the spring shearing. To do this we employ a small crew of shearers and put the sheep right through the shearing pens the same as at shearing time. All the wool between the hind legs and around the tail is cut off, and some wool is clipped farther forward so the new born lamb will not be misled several times by getting hold of dirty wool tags.

Winter Management.

After the tagging is over we are about ready to turn loose and all hands being tired from a long season's work are longing for this day to come. The old ewes too are just as anxious to be freed from the regular routine, to go where they please in the daytime to graze, to camp where they like to at night, or not at all perhaps.

Our winter range is located about 50 miles West of the famous Mt. Lassen. This possibly accounts for the fact that it is all a lava formation with about three to seven inches of soil in most places—in many others barely an inch.

It is all covered thickly with rocks. The hills are covered with scattering scrub oaks and along the creeks we have the live oak, both species of these trees furnish acorns some seasons which the sheep like very much in the early winter. This rocky formation seems to retain the heat from the long hot, dry summers with no rainfall, then when the first winter rains come the green grass starts here very quickly and by December, when we often have heavy frosts, the grass is strong enough to withstand it.

Our range is only fenced by natural boundaries, except on the west side. Here we join the grain farmers, their land being fenced, forms our west boundary line. On the north side of the range is Paynes creek, and on the south side is Antelope creek, each having its source back towards Mt. Lassen. These creeks are large enough all winter to suffice for a fence as the sheep seldom cross. The average distance between these two creeks is about six miles. For a fence on the east side of our range, we have nothing but the pine timber with no winter feed to entice the sheep away; and the higher elevation. which in winter is often covered with

Our sheep could go east for a distance of 30 miles, or more but it is seldom that they ever go in that direction more than 15 miles from the west boundary line, so you may say that they are entirely free to go where they choose in this area averaging about six miles wide and 15 miles long. This range furnishes feed for about 9000 sheep and 1500, or more cattle, all turned loose together. About 80 per cent of this area is deeded land. One or two men are kept in different sections of the range to put out salt when sheep happen to come around and to get a few stray dogs and coyotes that are always found where ever there are

In the early fall before the sheep are on the winter range we commence waging war on the coyotes by hiring experienced trappers. Our county pays a bounty of \$2.50 and we add to that \$5.00 for each coyote scalp. On this

range between August 1st and last Christmas time 97 coyotes were caught.

We do not turn loose our ewe lambs as there is more loss in lambs from varmints than in old sheep. As sheep are more valuable the past few years and coyotes seem to be more plentiful we do not turn loose now for only about six or seven weeks, whereas a few years ago the sheep were loose from November 1st, to February 20th. The loss now varies from 2 per cent to per cent, but when the sheep were loose for the longer period of time and the lambs were turned loose also with them the loss was from 5 per cent to 12 per cent. We aim to gather everything up now by February 5th, which is all done in two days.

The Lambing Season.

Our ewes are divided into bands of about 100 to 1200 for lambing, most of which is done without artificial shelter. The drop band is corralled every night and "drawn off" every morning from the ewes that have lambed the night before. After a ewe has her lamb able to follow, she is not corralled any more until marking time.

For ewes that have lost their lambs from varmints so the skin of their own lamb cannot be used to induce them to take another lamb, we build jails; this is done by putting two sixteen-foot panels together about 18 inches apart, and dividing this into four spaces called jails. By confining a ewe in this small space where she cannot turn around to fight the lamb she will generally own the lamb after 12 to 24 hours, although occasionally it fails altogether.

For stormy weather, we have corrals built in places that are somewhat sheltered, generally by a live oak thicket. For the unfortunate one that happens to be in an exposed place the first few hours on earth we provide him with a canvas-flannel lined blanket, (exhibits blanket). These blankets will save many lambs in cold stormy weather. It is not best to use the blanket on a lamb when the mother happens to be a young ewe, as she may become frightened and run away. But on ewes over two years

old (such as most of us have) there is but little trouble from this source.

In March we do most of our marking, but I am going to omit that subject until later and say just a word about shearing first.

Shearing.

I feel that it is useless for me to say much about shearing and preparing wool for market at this time partly because I wrote quite an article on that subject three years ago for the Wool Grower, but mainly because we have every opportunity to learn more on that subject from the discussions in the columns of the American Sheep Breeder and those in the National Wool Grower. I believe the advice given by the National Wool Warehouse along these lines at present is the very best we can get.

There is no excuse for any one sacking buck wool, tags, blackwool, and white wool, all together; but just how far we should go in grading and sorting wool at the shearing pens to secure the best results in selling, is a question of vast importance and one which can only be settled by time and experience. I will state, however, that the Commissioner from New Zealand told me in San Francisco last November, that the tendency in New Zealand is to do less of this work now at the shearing pens rather than more.

Marking Lambs.

It has always seemed to me that this part of our sheep management is but little ahead of pioneer times and something should have been done to improve these methods long ago.

First, the ears. In early days when there was danger of sheep being stolen by the hundreds, the lambs ears were often cut all to pieces, or most off, so the ear mark could not be changed easily. This is certainly not necessary now days. That unnecessary loss of blood and the needless pain, all help to set the lamb back in its growth. Why not use an ear mark that cuts away only small portions of the ear and those near the ends where they will not bleed so much?

Altering.

For the past ten years I have spent

considerable time and money each year experimenting with various emasculators of my own design and I feel confident that I have improved on the old system, particularly from a humane standpoint, but I will not discuss that subject farther at this time.

Docking.

It is now six years since I first made and used the hot docking iron. It is no more an experiment. For a long time I never mentioned the iron unless someone asked me about it for each vear I saw where improvements could be made, both in the iron itself and in the methods of using it. I wanted to have the iron perfect first and know that the results were beneficial. The first bunch of lambs that I ever docked with the hot iron I had a veterinary surgeon come to the ranch and witness the operation to see if he could foresee any evil results or offer any helpful suggestions. Each year brought better results, and two years ago I proved by actual figures what I knew to be true from observation, and I will give you the result of this experiment.

Results Obtained From Marking and Weighing Lambs in the Spring of 1914.

March 23rd, two sets of twin lambs were weighed and marked and kept in a small pasture with just a few pet sheep, where they had an excellent chance.

The older set of twins were 23 days old.

The younger set of twins were 11 days old.

Before marking, each of the older set weighed 20½ pounds—one wether and one ewe lamb.

Before marking, each of the younger set weighed 12½ pounds—one wether and one ewe lamb.

Note carefully that both lambs in each set of twins weighed exactly the same at these ages.

Each lamb was branded and records kept, with the following results:

March 30th, 1914-7 Days After Marking.

Knife docked ewe lamb, brand "O," weighed 141/4 pounds—gained 13/4 pounds.

Iron docked wether lamb, brand "1," weighed 15½ pounds—gained 3 pounds.

Knife docked wether lamb, brand "3," weighed 25 pounds—gained 4½ pounds.

Iron docked ewe lamb, brand "4," weighed 25½ pounds—gained 5 pounds.

Two knife docked lambs, one ewe, one wether lamb—4½ plus 1¾ pounds equals 6¼ pounds—gain in seven days for two knife marked lambs.

Two iron docked lambs, one ewe, one wether lamb—5 plus 3 pounds equals 8 pounds—gain in seven days for two iron marked lambs.

Two ewe lambs, one iron docked, one knife docked—1¾ plus 5 pounds equals 6¾ pounds—gain in seven days for two ewe lambs.

Two wether lambs, one iron docked, one knife docked—4½ plus 3 pounds equals 7½ pounds—gain in seven days for two wether lambs,

The two knife docked lambs gain 61/4 pounds in seven days.

The two iron docked lambs gained 8 pounds in seven days.

The small wether lamb gained 1¼ pounds more than his ewe lamb mate in seven days, because the tail was cut with the iron.

The large wether lamb gained a half pound less than his ewe lamb mate in seven days, because the tail was cut with the knife.

The lambs were weighed April 2nd, April 7th, and April 15th, with similar results; then again on April 23rd, for the last time, when they were turned into the band, and soon after started to the mountains.

Thirty Days After Marking.

Knife docked ewe lamb, brand "O" weighed 24½ pounds—gained 12 pounds.

Iron docked wether lamb, brand "1," weighed 27½ pounds—gained 15 pounds.

Knife docked wether lamb, brand "3," weighed 41½ pounds—gained 21

Iron docked ewe lambs, brand "4," weighed 40½ pounds—gained 20 pounds.

eareass

Janu

wha

terd

the

into

nes

leav

high

bus

low

age

pro

had

one

wh

car

nei

the

the

dea

an

an

vii

br

sto

fee

SV

be

W

F

st

da

fin

W

10

th

tr

Two wether lambs weighed 69 pounds, thirty days after marking.

Two ewe lambs weighed 65 pounds, thirty days after marking.

Two wether lambs gained 36 pounds in thirty days.

Two ewe lambs gained 32 pounds in thirty days.

Gain for two wether lambs over two ewe lambs, for 30 days, 4 pounds.

Two knife docked lambs weighed 66 pounds, thirty days after marking.

Two iron docked lambs weighed 68 pounds, thirty days after marking.

Two knifed docked lambs gained 33 pounds in thirty days.

Two iron docked lambs gained 35 pounds in thirty days.

Gain for two iron docked lambs over knife docked lambs, for thirty days, 2 pounds.

Conclusions.

First—Referring to first table, we find the two iron docked lambs, in the first seven days after marking, gained 134 pounds more than the knife docked lambs; and after thirty days, they still had the additional 134 pounds gain, with a half pound more besides, or an average of one pound each more gain than the knife docked lambs.

Second—The first table shows that the iron docked lambs for the first seven days after marking showed more gain than the knife docked lambs, taken collectively or separately, regardless of sex.

Third—If these lambs had been turned out in the band, as all the others are, where more or less handling is necessary, the iron docked lambs would no doubt have gained even more over the knife docked lambs than in this experiment where all were not disturbed after marking.

Fourth—While the saving in loss of life is very great, as no iron docked lambs ever bleed to death, yet far more important than this is the fact that none of the lambs are set back in their growth by docking, and therefore weigh more in one week or one month after docking, and with all other conditions being equal, why not more six months after?

Fifth-Buck lambs, properly altered,

will take on more fat than ewe lambs for the first thirty days after marking, which fact is true to history.

Sixth—Wether lambs can be docked with the iron just as short as ewe lambs with perfect safety.

In conclusion, let me state that I believe that more care and efficiency in all branches of our industry are necessary to keep the balance on the right side of the ledger. I believe that every branch of our detail work has made more advancement in the past fifty years than the marking of lambs. Do not forget that the lambs are the principal source of income at present, while wool is only a secondary consideration, Besides the financial part of it, remember too, that the lamb is the most innocent of all animals. It longs for kind treatment and responds graciously when it is given. But when mistreated the evil results are just as soon in evidence. Even in war stricken Europe everything possible is done to administer to the wounded and to alleviate pain and suffering; in the packing houses we have laws regulating the slaughtering of animals to prevent cruelty, so let us be merciful to the little lambs. The pain and suffering they endure while marking and afterwards, is most severe in spite of all we can do; and we should do everything possible to lessen this suffering for humane reasons alone, without even considering the better financial returns which are evident.

ON THE TWIN FALLS TRACT.

After having made inquiry of most of the sheep men wintering in this country, I am led to the conclusion that "optimism" is the word which expresses the situation. There has been an abundance of dry feed on the desert and late warm rains brought green feed and furnished moisture. Early lambing ewes were brought in on feed about the 1st to the 5th of January. The wool is well grown and the loss on account of brush has not been more than usual. Hay is \$7.00 and \$8.00 per ton, but most of the sheep men bought early in the fall at \$5.00 and \$5.50.

There are more sheep in this section than ever before, and there will consequently be more wool. Most of the ewes will be lambed in February and March. With a moderate winter there will be a heavy lambing crop.

Nearly all of the feeders in this section have disposed of their lambs at a nice profit.

There will be a good representation of the wool growers in this section at the National Wool Growers meetings.

S. G. RICH, Idaho.

LETTER SENT OUT BY DR. MACK OF NEVADA

Rabies is prevalent in Elko, Humboldt, Eureka, Lander, Washoe and White Pine counties. The widest prevalence is in Elko and Humboldt. There is one sheep case in White Pine, and several in other counties. Deaths among livestock are numerous. Thirtythree persons have received Pasteur treatment. The situation is serious and is growing worse. The only possible control measures are coyote extermination and the muzzling of dogs. Local officials can handle the dog work, but the coyote extermination is too big for the states alone. The federal government has given us twenty-five trappers. We need a large number more. I request that your governor, yourself, the state health board, livestock association and influential commercial bodies, as well as individuals, wire your senators and urge the secretary of agriculture to give immediate aid in coyote extermination in the several infected states on a sufficient scale to effect the purpose. We urge especially the grave menace to human life.

FROM FAR OFF KENTUCKY.

I never attended a meeting of the National Wool Growers' Association before, but unless something of large proportions happens I shall not again miss a meeting of that organization. I was greatly surprised to see the great number of delegates in attendance and to see the way the work of this convention is conducted.

ROBERT BLASTOCK, Kentucky.

Address, Improved Management of National Forest Stock

By WILL C. BARNES, Assistant Forester. Washington, D. C.

S CIENTIFIC management is today the keynote to success in every business proposition no matter what its character. The waste of yesterday forms the profit of today, and the old hit-and-miss methods have gone into the discard. The successful business man of the present time is he who leaves no stone unturned to obtain the highest possible efficiency from his business equipment together with the lowest possible cost of operation.

For the first few years of the management of the grazing areas within the National Forests, the men in charge of the work faced so many difficult problems of administration that they had little time to study the various economic phases of the great business which was in a way entrusted to their care.

The work was wholly new, they had neither precedents nor books to guide them. Long established usages among the stockmen with whom they were dealing had built up certain methods and practices. Under the old system of using the open government lands and as long as the whole country lay virgin before them, these methods had brought prosperity to the pioneer stockmen, but developed serious defects as soon as the first bloom was swept from the ranges and competition became intense. Gradually there was worked out of the chaos in which the Forest officers first found the range stock interests involved, certain fundamental principles that formed a foundation upon which they have built the first plan of controlled grazing the world has ever known. It took five long years of hard work to arrive at this point, and then with the administrative end of the situation fairly well established, the officials in charge of the organization turned their attention to that phase of the business which had to do with the management of the ranges and the animals themselves; in brief, better use of the ranges, fuller utilization of the forage on the ranges,

and better methods of handling the livestock using them.

It is all past history now, and those who have been through it either as owners or as forest officers can look back and recall the attitude of most stockmen using the ranges within the National Forests when the first regulations were issued which undertook to bring about certain reforms in the old-time methods of handling stock, which were believed to have outlived their usefulmess and could be greatly improved.



WILL C. BARNES

Those of us who had served an apprenticeship on the ranges, thoroughly understood the difficulties which we faced and fully realized that if we succeeded, it must be by first demonstrating to you the practicability of our plans, as well as the benefits that would come from adopting them. From the very first, we all realized that it was going to be hard to break down the habits of years and that we must prove

by actual visible facts and results that the plan would work, for while the practical range stockman was willing to be shown, he had grave doubts of the ability of any set of Forest officers to show him anything new in his business.

"Open Herding" System of Sheep Grazing.

One of the first studies which was made by Forest officers was the handling of sheep on the ranges. When the range sheep business of the west was in its infancy and each owner had almost unlimited feed, the herders simply drifted their bands from place to place, camping wherever night overtook them, the ideal method of sheep management. Then little by little, neighbors closed in about them until through custom, each owner's ranges were fairly well defined, and the old method of one-night stands gave way to fairly long stops on one bed ground, remaining until the range about it was completely denuded and then going on to another area. The danger of mixing with nearby bands came with the increase in numbers, and thus we find that not only did the stops on one bed ground grow longer but that the sheep were held far more closely together-a system which not only brought ruin upon the ranges, but also injury to the

We believed the old system of drifting the sheep instead of driving them, of allowing them to bed down wherever night overtook them as they did in the old days, would bring far better results than the system then in use. The first attempts to bring about a change in these methods found little favor in the eyes of either owners or herders. It was argued that the losses from cuts and predatory animals would be greatly increased; that it would be impossible to keep the sheep in hand unless constantly under the herder's eye. Doubtless many of you remember the objections which were raised against these plans, there being a general feeling that the methods in use for years were satisfactory and that Forest officers were not sufficiently experienced to advise stockmen as to the best methods of handling their herds.

In California, one or two of the more progressive sheepmen, without committing themselves to the plan, offered a few bands of sheep for experimental work, the Service to furnish a Forest officer as herder, and the sheep to be handled in accordance with the plans laid out by the men entrusted with the inauguration of the experiments. One of the features of this system was a general taboo on dogs. The dog was to be the herder's companion and a protector of the herds against predatory animals, but not to be used as a herder. That this aroused the hostility of lazy herders goes without saying.

This was our first beginning in what is now variously called "Open herding," the Burro or, "Blanket system." The results of these experiments convinced the owners that it was money in their pockets to adopt them, and when that point was reached, our pioneer work of introducing the plan was over, and today fully fifty per cent of the sheep grazed upon National Forest ranges are handled exclusively by this method, with constantly increasing rectuits to the system.

In nearly all these experiments two bands of sheep were used-one handled under the old system, and one under the new—the range conditions being as far as possible identical. Keen-eyed Forest officers have followed both bands all summer long, keeping careful track of their movements from the time they left the bed ground in the morning until they settled down again for the night. The results of these experiments, which have been given out through published articles in your Association magazine, indicate quite clearly that under the "open herding" or "bedding out" system, the losses from all sources are reduced fifty per cent or more, the lambs invariably weigh several pounds more per head than the same grade of lambs in the check bands, the wool growth is imthe ranges almost doubled.

timbered ranges, however, on which the owners insisted sheep could not be handled with success under this system, and it was necessary to institute a series of experiments on that class of range. This was done on the Payette National Forest in Idaho on brush and timbered range, where dogs and close herding were considered absolutely necessary in handling the sheep. Here again our experiments succeeded perfectly, the experimental band showing all the results claimed for the system over the check band used.

So satisfactory was the open herding system that after three years' experiments, the Service as a final check decided to run two bands on adjoining ranges-one under the old methods, and the other under the new system. On this range, practically every owner was working under the new system, and when asked to furnish the experimental bands, all positively declined to furnish the band to be handled under the old plans unless paid fifty cents per head bonus, claiming that there was easily that much difference between the two systems. This was indeed the acid test of the new system.

Pastures and Sheds for Range Lambing.

For six years, the Service has been conducting a series of experiments covering the use of sheds and small fenced pastures during lambing time. This work was done on the Cochetopa Forest in Colorado under range, climatic and other conditions that approximate very closely those which prevail over a large part of the west during lambing time. The idea in this experiment. was not to enclose large areas for many owners would be unable to secure land in large blocks for such uses. It was felt, however, that 320 acres was within the means of the average range sheep owner, and the experiments were therefore carried out on areas of this

Briefly the plan is to divide the land into several small pastures in which the ewes are placed in small numbers

proved, and the carrying capacity of to drop their lambs. As the lambs are owned and settled down with their There were certain brushy, heavily- mothers, which takes but a day or two for the majority of them, the bunch is turned into the next pasture with others of the same age, and from that to larger pastures until just as soon as it is seen that the lambs can take care of themselves, they are turned out into the range bunch. In this way there was a constant flow of lambs and ewes through the pastures out to the open range, and at no time was the entire herd in them. Meantime lambs that were not properly mothered-twins and orphans-were taken care of by the various methods which all range sheepmen practice, with the result that on an average the number of lambs raised is about seven per cent above the number raised in the check band handled under ordinary usages on the adjoining range, where all conditions of range, weather, etc., were practically identical.

> The sheds maintained at these pastures were simply rough shelters, meant only to protect the lambing ewes from severe weather.

> The average crew used at the experimental pastures for the six years was four men. The check band averaged six men and boys, thus showing a considerable gain in lessening of the labor costs. Credit should also be given to the gain to the owner through being in a measure independent of labor, because in an emergency one man could manage the whole plant for a day or two or until additional help could be secured.

> Taking the cost of all improvements and balancing it against the increased number of lambs saved and lower labor costs, such a set of lambing sheds and pastures will easily pay for itself in a few years. The cost of the Cochetopa plant was approximately \$1,800, which was considerably more than it should have been owing to conditions surrounding its erection, the need of haste in finishing it, etc., which added considerably to the cost. Under average conditions, such a plant as the one at the Cochetopa pastures could be duplicated for about \$1,500. If the owner does his own work, it will be

much less. The upkeep for the six probably once every three days is as vears was very small, and under ordinary circumstances, the improvements should last for not less than twenty years.

Grazing Sheep Without Water.

On many of the western ranges, there are certain areas well suited for sheep grazing purposes, but which have no available supply of water. Every sheep owner knows, of course, that sheep will go for considerable periods of time without being driven to water with no apparent injurious effects. There was, however, no definite information as to just what the real effects on the animals were, and inasmuch as it seemed well worth careful investigation, observations were made of several bands grazed on ranges where water could not easily be secured for the sheep. The results were sufficiently definite to establish the fact that sheep do not need water every day, and that bands are often driven to water down deep canyons or over difficult trails with positive injury to them and without real need.

On the Uinta Forest in southern Utah, 3,200 ewes in two bands together with their lambs secured no water other than the natural moisture found in the succulent feed and the dews usual in high ranges, from June 10 to September 20, a period of 100 days. When shipped in the fall, the lambs weighed fully up to the average of lambs of the same grade raised on adjacent ranges where water was available whenever the sheep desired it. Sheep grazed under such conditions must be handled under the open system of grazing with as little rounding up or unnecessary bunching and harrying as is possible. The concrete results of this experiment established the fact that, (1) under certain conditions of dew, local rains and succulent feed, together with plenty of shade during the warmer parts of the days, sheep may be grazed for long periods without actually drinking; (2) they are frequently driven to water over rough trails and for long distances when they really do not desire or need water; and (3) on the average mountain range,

often as sheep should be driven to water when the above conditions of dew and succulent feed are below the normal. This, the experiments indicate, can be done without injury to the ewes or any appreciable check in the growth and development of their lambs.

Deferred and Rotation Grazing.

Another important result of the investigative work of the Branch of Grazing of the Forest Service has been the development of a plan of grazing that allows the use of the ranges and at the same time gives the grasses an opportunity to reseed the areas naturally. This was accomplished in two different ways. Deferred grazing-is managed by reserving a certain part of the range from all grazing until late enough in the fall to give the seed crop plenty of time to mature. Then with the plants well headed out and the seed fully matured, the area is grazed over. The forage is generally at its best at such times, the animals seem to relish it immensely, and the act of feeding off the forage crop together with the trampling of the stock gives the seeds the necessary covering.

Roughly the plan of rotation grazing is to divide the range in five or more sections, allowing one of the sections to remain unused each year. This rotation system requires, of course, a certain amount of surplus range, and moreover after a series of very careful investigations on summer sheep ranges in Oregon, it was proved to our entire satisfaction that areas grazed under the deferred system recovered more rapidly and showed better results than under the rotation system.

For these reasons, deferred grazing is undoubtedly the best known method of assisting nature to restore the ranges to as near their original primitive conditions as is possible, and at the same time continue its use. There is no secret in the system, it needs no special equipment or outlay, nor need it interfere in any way with the conservative handing of the stock. All that is requisite to produce results is common sense and a desire to improve one's range to the end that his business may

be perpetuated and the range preserved.

As before stated, all these experiments have been placed before you in articles printed in the 1915 issues of your excellent Association magazine, in which will be found the broader details of each experiment together with a mass of information regarding the subject that is of vital importance to every range sheep man.

The only thing that now remains to make the experiments worth while is putting them into practical operation on your ranges. The Forest officers who have handled this work believe all of these plans mean increased profits to each owner who tries them out. They have watched every point with the utmost care, eliminated every possible chance of error, and it is felt that the results as published can be safely relied upon to produce the predicted benefits. Any of you who desire to put this plan into operation with your own stock, will find our Supervisor and Ranger both willing and anxious to assist in every possible way if you will give them an opportunity to do so.

National Forest Ranges in 1915.

In the Washington office, we have just finished reviewing the annual reports from the Supervisors of 155 National Forests, covering the grazing of live stock during the season of 1915. During this time, over eight million head of sheep and goats and two million head of cattle and horses grazed on these ranges, and generally it has been a season of great prosperity among the owners of all classes of live stock.

With the exception of the extreme Southwest, in Texas, New Mexico and Arizona, and also in the western part of Montana where the summer rains were above normal, it has been one of the driest summers for many years. Over a large portion of the Northwest there was a period of over one hundred days during which no rain fell, excepting in small, isolated areas. On account of this drought, we all looked for a most unsatisfactory forage growth, and feared the stock would leave the forests in the fall in poor condition. To our

yea

are

0.0

wit

app

ho

ius

vat

gra

not

Th

est

nee

are

car

pos

rea

Ut

get

wa

fou

dev

10

day

adi

abl

Sh

mu

ten

ing

Sul

fac

of

tog

the

ma

qu

tra

rea

and

(

eral feeling that the methods in use for years were satisfactory and that Forest officers were not sufficiently experienced to advise stockmen as to the best methods of handling their herds.

In California, one or two of the more progressive sheepmen, without committing themselves to the plan, offered a few bands of sheep for experimental work, the Service to furnish a Forest officer as herder, and the sheep to be handled in accordance with the plans laid out by the men entrusted with the inauguration of the experiments. One of the features of this system was a general taboo on dogs. The dog was to be the herder's companion and a protector of the herds against predatory animals, but not to be used as a herder. That this aroused the hostility of lazy herders goes without saying.

This was our first beginning in what is now variously called "Open herding," the Burro or, "Blanket system." The results of these experiments convinced the owners that it was money in their pockets to adopt them, and when that point was reached, our pioneer work of introducing the plan was over, and today fully fifty per cent of the sheep grazed upon National Forest ranges are handled exclusively by this method, with constantly increasing recruits to the system.

In nearly all these experiments two bands of sheep were used-one handled under the old system, and one under the new-the range conditions being as far as possible identical. Keen-eyed Forest officers have followed both bands all summer long, keeping careful track of their movements from the time they left the bed ground in the morning until they settled down again for the night. The results of these experiments, which have been given out through published articles in your Association magazine, indicate quite clearly that under the "open herding" or "bedding out" system, the losses from all sources are reduced fifty per cent or more, the lambs invariably weigh several pounds more per head than the same grade of lambs in the check bands, the wool growth is im-

proved, and the carrying capacity of the ranges almost doubled.

There were certain brushy, heavily-timbered ranges, however, on which the owners insisted sheep could not be handled with success under this system, and it was necessary to institute a series of experiments on that class of range. This was done on the Payette National Forest in Idaho on brush and timbered range, where dogs and close herding were considered absolutely necessary in handling the sheep. Here again our experiments succeeded perfectly, the experimental band showing all the results claimed for the system over the check band used.

So satisfactory was the open herding system that after three years' experiments, the Service as a final check decided to run two bands on adjoining ranges-one under the old methods, and the other under the new system. On this range, practically every owner was working under the new system, and when asked to furnish the experimental bands, all positively declined to furnish the band to be handled under the old plans unless paid fifty cents per head bonus, claiming that there was easily that much difference between the two systems. This was indeed the acid test of the new system.

Pastures and Sheds for Range Lambing.

For six years, the Service has been conducting a series of experiments covering the use of sheds and small fenced pastures during lambing time. This work was done on the Cochetopa Forest in Colorado under range, climatic and other conditions that approximate very closely those which prevail over a large part of the west during lambing time. The idea in this experiment was not to enclose large areas for many owners would be unable to secure land in large blocks for such uses. It was felt, however, that 320 acres was within the means of the average range sheep owner, and the experiments were therefore carried out on areas of this size.

Briefly the plan is to divide the land into several small pastures in which the ewes are placed in small numbers

to drop their lambs. As the lambs are owned and settled down with their mothers, which takes but a day or two for the majority of them, the bunch is turned into the next pasture with others of the same age, and from that to larger pastures until just as soon as it is seen that the lambs can take care of themselves, they are turned out into the range bunch. In this way there was a constant flow of lambs and ewes through the pastures out to the open range, and at no time was the entire herd in them. Meantime lambs that were not properly mothered-twins and orphans-were taken care of by the various methods which all range sheep men practice, with the result that on an average the number of lambs raised is about seven per cent above the number raised in the check band handled under ordinary usages on the adjoining range, where all conditions of range weather, etc., were practically identical

The sheds maintained at these pastures were simply rough shelters meant only to protect the lambing ewes from severe weather.

The average crew used at the experimental pastures for the six years was four men. The check band averaged six men and boys, thus showing a considerable gain in lessening of the labor costs. Credit should also be given to the gain to the owner through being in a measure independent of labor, because in an emergency one man could manage the whole plant for a day or two or until additional help could be secured.

Taking the cost of all improvements and balancing it against the increased number of lambs saved and lower labor costs, such a set of lambing sheds and pastures will easily pay for itself in a few years. The cost of the Cochetopa plant was approximately \$1,800 which was considerably more than should have been owing to conditions surrounding its erection, the need o haste in finishing it, etc., which added considerably to the cost. Under average conditions, such a plant as the one at the Cochetopa pastures could be duplicated for about \$1,500. If the owner does his own work, it will be 916

heir

two

inch

with

that

n as

care

into

here

wes

pen

atire

that

and

the

eep-

n an

ed is

um-

dled

ning

inge,

tical

pas-

ters

ewes

peri

wa

aged

con

e la

giver

peing

r, be

could

ay of

d be

nents

eased

er la-

sheds

itself

oche-

1,800

an i

itions

d of

added

aver-

e one

d be

much less. The upkeep for the six years was very small, and under ordinary circumstances, the improvements should last for not less than twenty years.

Grazing Sheep Without Water.

On many of the western ranges, there are certain areas well suited for sheep grazing purposes, but which have no available supply of water. Every sheep owner knows, of course, that sheep will for considerable periods of time without being driven to water with no apparent injurious effects. There was, however, no definite information as to just what the real effects on the animals were, and inasmuch as it seemed well worth careful investigation, observations were made of several bands grazed on ranges where water could not easily be secured for the sheep. The results were sufficiently definite to establish the fact that sheep do not need water every day, and that bands are often driven to water down deep canvons or over difficult trails with positive injury to them and without real need.

On the Uinta Forest in southern Utah, 3,200 ewes in two bands gether with their lambs secured no water other than the natural moisture found in the succulent feed and the dews usual in high ranges, from June 10 to September 20, a period of 100 days. When shipped in the fall, the lambs weighed fully up to the average of lambs of the same grade raised on adjacent ranges where water was available whenever the sheep desired it. Sheep grazed under such conditions must be handled under the open system of grazing with as little rounding up or unnecessary bunching and harrying as is possible. The concrete results of this experiment established the fact that, (1) under certain conditions of dew, local rains and succulent feed, together with plenty of shade during the warmer parts of the days, sheep may be grazed for long periods without actually drinking; (2) they are frequently driven to water over rough trails and for long distances when they really do not desire or need water; the and (3) on the average mountain range, rill be

probably once every three days is as often as sheep should be driven to water when the above conditions of dew and succulent feed are below the normal. This, the experiments indicate, can be done without injury to the ewes or any appreciable check in the growth and development of their lambs.

Deferred and Rotation Grazing.

Another important result of the investigative work of the Branch of Grazing of the Forest Service has been the development of a plan of grazing that allows the use of the ranges and at the same time gives the grasses an opportunity to reseed the areas naturally. This was accomplished in two different ways. Deferred grazing-is managed by reserving a certain part of the range from all grazing until late enough in the fall to give the seed crop plenty of time to mature. Then with the plants well headed out and the seed fully matured, the area is grazed over. The forage is generally at its best at such times, the animals seem to relish it immensely, and the act of feeding off the forage crop together with the trampling of the stock gives the seeds the necessary covering.

Roughly the plan of rotation grazing is to divide the range in five or more sections, allowing one of the sections to remain unused each year. This rotation system requires, of course, a certain amount of surplus range, and moreover after a series of very careful investigations on summer sheep ranges in Oregon, it was proved to our entire satisfaction that areas grazed under the deferred system recovered more rapidly and showed better results than under the rotation system.

For these reasons, deferred grazing is undoubtedly the best known method of assisting nature to restore the ranges to as near their original primitive conditions as is possible, and at the same time continue its use. There is no secret in the system, it needs no special equipment or outlay, nor need it interfere in any way with the conservative handing of the stock. All that is requisite to produce results is common sense and a desire to improve one's range to the end that his business may

be perpetuated and the range preserved.

As before stated, all these experiments have been placed before you in articles printed in the 1915 issues of your excellent Association magazine, in which will be found the broader details of each experiment together with a mass of information regarding the subject that is of vital importance to every range sheep man.

The only thing that now remains to make the experiments worth while is putting them into practical operation on your ranges. The Forest officers who have handled this work believe all of these plans mean increased profits to each owner who tries them out. They have watched every point with the utmost care, eliminated every possible chance of error, and it is felt that the results as published can be safely relied upon to produce the predicted benefits. Any of you who desire to put this plan into operation with your own stock, will find our Supervisor and Ranger both willing and anxious to assist in every possible way if you will give them an opportunity to do so.

National Forest Ranges in 1915.

In the Washington office, we have just finished reviewing the annual reports from the Supervisors of 155 National Forests, covering the grazing of live stock during the season of 1915. During this time, over eight million head of sheep and goats and two million head of cattle and horses grazed on these ranges, and generally it has been a season of great prosperity among the owners of all classes of live stock.

With the exception of the extreme Southwest, in Texas, New Mexico and Arizona, and also in the western part of Montana where the summer rains were above normal, it has been one of the driest summers for many years. Over a large portion of the Northwest there was a period of over one hundred days during which no rain fell, excepting in small, isolated areas. On account of this drought, we all looked for a most unsatisfactory forage growth, and feared the stock would leave the forests in the fall in poor condition. To our

be

in

fac

th

OV

ad

m

Sti

ha

SU

th

du

sto

da

fix

th

in

great surprise, the reports indicate that the stock left the forests, with few exceptions, in splendid condition. Not only were the lambs well grown and fully up to the standard weight of previous years, but the flesh was unusually solid and they stood trailing and shipping experiences with less than the usual shrinkage. In looking about for reasons for so unexpected a termination of what started in to be a poor season, we attribute the splendid condition of the stock, first, to the feed itself, which although dry was of a quality that produced good hard flesh; and second, and what we believe is more to the point, the fact that Forest officers and users all appreciated the seriousness of the situation and the stock was handled more carefully, greater attention given to keeping the animals on the best feed, and in every way utilizing the forage to the fullest possible extent. This to our minds proves conclusively a point which we have always maintained; that with proper management our ranges will not only carry more animals than they have in the past, but the animals will leave the ranges in better condition. This unprecedented dry season has also tested the carrying capacity of our ranges in such a way as to enable us to make some very conclusive estimates as to the number of stock which they will safely carry under such conditions. It is easy enough to manage ranges when everything is going along in a satisfactory way with plenty of rain and feed everywhere, but the crucial period is when the rainfall is below the normal and feed is short. Therefore in future plans, the season of 1915 in most of our forests will be a basis for estimating the number of stock which the ranges will safely carry under sub-normal con-

A few years ago, a representative of the Forest Service stated at one of your meetings that we were face to face with a condition in which a large number of permittees who had previously been running cattle were desirous of changing to sheep. With care, we were able at that time to meet the desires of a majority of the applicants without in-

jury to the range or complications of latter situation we have worked hard any serious nature.

During the latter part of 1915, the pendulum has swung the other way and we now find ourselves facing a large number of applications from owners who desire to change from sheep to cattle. This, of course, has been brought about through the recent rise in cattle values, and that too is spite of the fact that the sheep buisness is today on perhaps quite as profitable a basis as a business proposition as ever before. However, as we did a few years ago, we feel ourselves able at the present time to meet the situation and in adjusting the matter, are making such changes in the allotments as seem advisable.

We were also impressed, in reading these reports, with the fact that a large number of our sheep permittees are running much smaller bands than heretofore. The result of careful observations by our field men satisfied us some years ago that sheep would be found more profitable when run in moderate sized bands, certainly not over 1,500 head of grown animals, and more satisfactory still at not over 1,200, the additional cost of labor being more than made up in the increased value of the lambs raised, the better grade of both lambs and ewes, and an undoubted increase in the weight of wool. Losses from cuts, snagging, predatory animals and other causes are always less in small bands than in large ones, and all these things, in our opinion, more than offset the somewhat increased labor cost of handling small bands.

We have today a large amount of unused high-grade sheep range in many of the forests of northern Idaho and western Montana which at a rough estimate will carry about 300,000 head of sheep. Some of these ranges, of course, are located in such inaccessible portions of the forests that they cannot be profitably utilized at the present time. Others of them are comparatively easy to reach, but the country adjacent to them not being an agricultural region there is no place to winter them. Still other areas can be reached only by shipping in from the railroads. This

latter situation we have worked hard to overcome, and through the activities of the Forest officers considerable reductions in shipping rates have been secured, which has brought onto these ranges a large number of sheep which have not hitherto used National Forest ranges.

We hope to be able to secure from the railroads still further concessions along these lines, and thus open up more of these unused ranges.

Referring to the condition of the live stock leaving the forests, it may not be amiss to quote one or two instances which have come under our observation as to weights, etc., during the season of 1915.

On the Beaverhead National Forest in the western part of Montana, out of a band of 900 ewes grazed on the forest the owner raised and shipped 880 lambs which averaged 97 pounds per head after being driven 55 miles to the shipping point.

In northern Arizona on the Coconino Forest, one firm raised a 122 per cent lamb crop, and the average weight of the lambs on the Kansas City market was 73 pounds. The firm sold its wool in Boston at 31c.

On the Wyoming National Forest, a large shipment of lambs averaged 80 pounds per head on the scales at Omaha, netting \$7.12 each. Another large shipment from the same forest averaged 84 pounds on the Omaha scales, netting \$6.85 each.

On the Hayden National Forest in northern Colorado, the Supervisor states that the sheepmen at a recent meeting agreed that their 1915 lambs averaged fully ten pounds per head above the average of ten years ago, which they attributed entirely to the benefits they were receiving through grazing their stock on the protected forest ranges.

On the Madison National Forest in from southwestern Montana the supervisor kept close check on the lamb shipments from his forest. The average weight of 50,000 head of April and May lambs after being shrunk for twelve hours was 75.7 pounds each. One large shipment of May lambs after twelve ab

1916.

hard ctivi-

rable

been

these

vhich

orest

from

sions

n up

e live

ot be

ances

erva-

e sea-

orest

out of

e ford 880

s per

to the

onino

cent ght of

narket

wool

rest, a

ed 80

es at

nother

forest

maha

est in

rvisor

recent

lambs

head

s ago,

to the

rough

ipervi-

The relations existing between the Forest Service and the stockmen, especially the sheep owners, continue to be very friendly. Here and there complaints arise, which we endeavor in every possible way to meet and adjust on a friendly basis. When the number of stock we are grazing is taken into consideration, together with the fact that they are owned by over thirty thousand different permittees grazing over a country extending from the Canadian to the Mexican line, and covering every class of domestic grazing animals from turkeys to swine, it is not surprising that here and there some complaints should be heard.

The officials of the Forest Service in the last few years have realized that the strongest supporters of the plan of forest protection are the stockmen with whom we are working in such complete harmony.

We are all anxious to continue to merit your approval and command your support, and I can say for every man in the Service, from the Forester down, that we shall work harder than ever during the year 1916 to aid in every possible way the stockmen using the National forests.

IN SOUTHEASTERN IDAHO.

We are having a fine snow storm in Southeastern Idaho, more snow having fallen than we had all the winter. This storm assures fine range and an abundance of water for irrigating. Sheep and cattle were pastured up to Christmas. They go into the winter in fine fix with an abundance of hay.

Wm. Winchell, member of the Idaho Livestock Sanitary Board, reported to the Soda Springs Grazing Association in session here today, January 10, that rest in from March 1 to January 8 the state paid bounties on 14,380 coyotes and 850 bears, and as the bounty on coyotes verage is \$2.50 each and on bears \$10.00 each, d May hunters and trappers have reaped quite twelve a reward. The Soda Springs Grazing e large Association represents an ownership of twelve about 5,000 cattle and 100,000 sheep.

hours shrinkage averaged 91.6 pounds The Association pays the state about \$7,000.00 per annum rentals on lands and about \$10,000,00 in taxes on sheep and cattle and in this way repays the state their pro rata of the bounty money many fold. The Association paid an additional bounty last year on coyotes of \$2.50 each and \$25.00 each on wolves. This next season a bounty of \$1.50 on coyotes and \$15.00 on wolves was voted unanimously. During the season of 1915 the Association paid about \$2,400.00 bounty money, and it was the sentiment of all members present that they had never spent money to better advantage.

DO IT NOW!

On January first each year the dues of every member of the National Wool Growers' Association are due. These dues amount to only \$5.00 per year, and \$1.00 of this goes to pay your subscription to the National Wool Grower. Every Western sheepman can afford to pay \$5.00 and we urge him to forward this amount at once.

The date of the annual meeting was changed from the second Monday in January to the second Tuesday in May in order that a larger attendance of members may be had. The meeting adjourned to meet May 2, all officers holding over until that date.

A. J. KNOLLIN, Soda Springs, Idaho.

WHAT ARIZONA THINKS.

I have never seen a better meeting of stockmen than the National Wool Growers' Convention this year. Ordinarily your conventions have been attended by from three to six hundred

delegates, but it looked to me as if you had almost a thousand at this meeting. Not only was the attendance good, but there was a fine feeling among the delegates, and I am sure that everyone returned well repaid for the time and money spent in getting to Salt Lake.

M. I. POWERS, Arizona.

THE WAY CALIFORNIA FEELS.

I have attended all but one of the conventions of the National Wool Growers' Association in the last six years, and as I did not arrive at this last one until three o'clock of the first day, you can imagine my surprise at seeing about one thousand sheepmen seated in the convention hall. I believe it was the best convention that I have ever seen, and I hope that it has proved of as much value to the other delegates as it did to me. While California was not as strongly represented as many of the states, still we had more in attendance than has ever been the case before. I think, however, that after this meeting you will have a larger attendance from our state. would not have missed it for many times what it cost me.

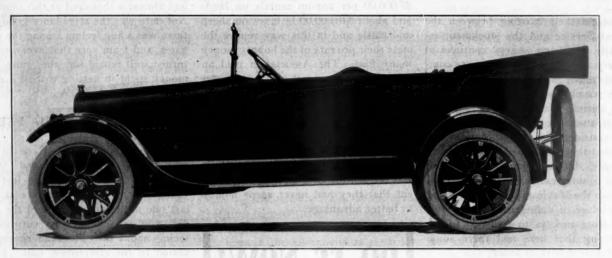
F. A. ELLENWOOD, California.

A WORD FROM MONTANA.

I always make it a point to attend the National Wool Growers' Convention, regardless of when or where it is held, but everyone who was present at this last convention has certainly made a new resolution never to miss another meeting unless unavoidably detained. On account of the heavy snowstorm we Montana delegates may have a little trouble in getting back home, as there are a good many of us to go back, because Montana was well represented, but I am sure no one would have missed the convention for a little thing like a blizzard.

F. D. MIRACLE, Montana.

Every sheepman ought to have sufficient pride in his business to help support the National Wool Growers' Association.



Chandler 7 passenger York Show conceded by

\$1295.00 f. o. b. Factory

The sensation of the New the dealers to be the handsomest car for this season.

Chalmers 5 passenger Chalmers out-demonstrates

"No Hill Too Steep, No Sand Too Deep." \$1050.00 f. o. b. Factory.

Dort 5 passenger A most remarkable small car that will compare favorably with any car selling

for \$300 more. Every modern improvement.

\$650.00 f. o. b. Factory.

You are cordially invited to call and examine these cars and take a demonstration. We prove our statements.

C. A. QUIGLEY, Distributor

33 Exchange Place opposite the Commercial Club

Salt Lake City, Utah.

16.

restone

Every day-for every road and serviceon test before the men who know—and by the highest standards Firestones win.

This popularity is the result of trained judgment in selection.

They know the value of the right choice—whether in tires or grain—the need for inbuilt POWER for future results.

Firestone Users Are Firestone Friends

They know that the generous quantity of rubber and fabric is planned exactly right by specialists in the largest exclusive tire concern in the world.

Limitless distribution, efficient business methods and enormous volume—all account naturally for the low prices. See your dealer.



SAFETY FIRST

THE SLOGAN of the Industrial World of today may well be followed by the careful Sheepman and he should realize a Vital Point -a point where Safety is most needed-is in Marketing.

SAFETY FIRST should then be uppermost in the mind of every shipper: The consigning of same a matter of careful consideration and forethought, not to be wafted hither or thither by rosy promises or eager solicitation.

SAFETY FIRST in marketing means Direct Consignment into Safe Hands: To a Firm recognized by the trade as Honest, Efficient and in position to give you the SERVICE you expect and to which you are entitled.

OUR CUSTOMERS know their shipments are Safe when consigned to us. They realize we depend for future business on RESULTS. not Promises and that our record shows Results most Satisfying.

LET YOUR MOTTO likewise be "Safety First" and consign future shipments direct

R. SMITH & SON

"Who Handle Nothing But Sheep"

JOHN SMITH C. E. COYLE

WM. R. (Bill) SMITH J. CLARK EASTES

South Omaha — Chicago

Shear Your Sheep By Machine

You have your automobile instead of the ox cart of your father; you use a modern grain harvester instead of the old hand sickle of your ancestors: why not be modern and progressive also in shearing your sheep? Get Stewart Machines and do your shearing easily, quickly and economically—they are the modern way.

The Best Hand Operated Machine

Stewart No. 9 Ball Bearing Sheep Shearing Machine Price \$11.50

This machine has ball bearings in every universal joint and the shearing head is also fitted with ball bearings. The enclosed gear case contains a large balance wheel and the entire mechanism is made to do the work quickly and with the minimum effort.

No other hand operated shearing machine turns so easily or will do quite us much shearing in the same time that this machine will do it. The price all complete with the ball bearing shearing head and four combs and four cutters is only \$11.50.

Get one and shear in comfort this year.

Stewart Little Wonder

If you have 500 or more sheep to shear, and if you have no power at hand, you could not make a better investment than to purchase this outfit.

You Can Shear 200 to 400 Sheep a day w th it

Consists of full two-horse power gasoline engine, two latest improved Stewart power shearing machines and grinder, as shown in the illustration.

we Scores of letters from users, all testifying to the great advantages of this solended outfit. The engine can also be used to pump water saw wood, run cream separator, etc. Write for complete Catalog TODAY th

15

fu

Stewart Power Sheep Shearing Machines



Warren Live Stock Co's. Plant, Cheyenne, Wyo.

For the man who has a large number of sheep, say 5,000 or more to shear, the economical and practical outfit is a plant of Stewart enclosed overhead gear machines. They are in almost universal use in Australia, Argentine, South Africa, etc., and are the only type used in this country.

Now is the time to order a plant for you next shearing.

Write us today for Catalogue No. 44, just off the press. It shows just what is supplied with plants of various sizes, prices, etc. Write now for

CHICAGO FLEXIBLE SHAFT COMPANY, 596 La Salle Chicago

916.

The National Wool Grower

Published Monthly by the National Wool Growers' Association Company (Incorporated)

Published at 718 McIntyre Bldg., Salt Lake City, Utah

Edited by the Secretary

Subscription One Dollar Per Year. Entered as Second-Class Matter January, 1913, at the Post Office at Salt Lake City, Utah, under Act March 3 1879.

YOUR 52ND ANNUAL CONVEN-TION.

The 52nd Annual Convention of the National Wool Growers' Association surpassed in every commendable way any meeting that this old Association has ever held; and there cannot be the slightest doubt that in point of attendance it far outclassed any meeting that the National Wool Growers Association has seen since its beginning in 1864. It is not possible to state exactly the number in attendance, but at the afternoon session on January 13, there was 950 chairs occupied and close to 100 people standing, therefore, it is not far from accuracy to place the attendance at 1000 individuals, and this makes a very large convention. One hears frequently about big conventions but on investigation they generally turn out much smaller than is claimed, but we feel confident that when every test is applied this 52nd meeting will prove to have had an attendance right around the 1000 mark.

The convention was held in the Auditorium, a building 250 feet long and 150 feet wide. In one end of this building was staged the excellent wool exhibit of the National Wool Warehouse and in the other end the meetings were held. This was an admirable arrangement as it allowed the delegates, when not in session, to examine this wonderful collection of wools.

Of course, members do not of necessity mean a successful meeting; people go to conventions of this kind to learn or impart knowledge and that is what brought these thousand people,

interested in some phase of the sheep industry, to this convention. That they were not fooled was clearly evidenced by the discussions and the profound interest taken in those discussions. As an evidence of this interest all sessions were well attended and many delegates on the floor asked questions as well as took part in discussions. In addition to this the wool exhibit was always near and hundreds of sheepmen studied it from beginning to end. This exhibit was better than ever before for it contained a big line of commercial wools raised in different parts of the world. To woolgrowers who have been used to seeing a few small samples of "hot house" raised foreign wool these commercial lines of just ordinary wool were a revelation. In connection with this exhibit there was a demonstration in sheep shearing and wool grading as well as a model shearing shed.

Delegates were in attendance from 19 states with two sheepmen from Canada. They came from as far east as Kentucky and from California on the west; from New Mexico on the south to Washington on the north. Yes, it was a wonderful meeting and will always be remembered as such. The resolutions appear in this issue as do many of the addresses. Others will be published later.

The old officers were all re-elected for another year.

THE NATIONAL WOOL WAREHOUSE

All the old contracts under which

the National Wool Warehouse & Storage Company has been maintained expired on October 31 last. Since that time the air has been filled with rumors that as soon as the wool on hand had been disposed of the warehouse would be liquidated by returning to the stockholders the money they had invested in it together with the surplus accumulated. These were sad rumors to the many sheepmen who had stood behind the warehouse during the seven years of its existance and who know the wonderful work being done by this necessary organization. But dame rumor is more often wrong than right and in this instance she did not have a foot to stand on, and how fortunate this is for western woolgrowers. Whether the Warehouse was to go on or not was submitted candidly to the delegates at the 52nd convention of the National Wool Growers' Association and those delegates responded by signing up sufficient stock to guarantee the continuation of the Warehouse for the next five years. Sheepmen who were never members of the Warehouse before came forward and took out stock in a manner that left no doubt as to the value they placed on the Warehouse, and old stockholders who were still in the business signed up almost to a man. It is our prediction that western sheepmen are going to give this Warehouse better support than it has ever received, and that is as it should be. God speed the day when the bulk of western sheep men will see the necessity of maintaining a strong wool selling agency of their own if for no other reason than to have insurance so that in the event they need it they will have a place to send their wool and their own agents to advise them of its value.

COMMITTEE ON THE DESTRUC-TION OF PREDATORY WILD ANIMALS APPOINTED.

The United States Marine Hospital and Public Health Service, at the instigation of Western governors and health officers, has called a meeting of the various public health officers to

000

and

tion

nes

lim

eig

try

try

7

ED

con

law

pro

Tar

Reg

cen

out

- V

mea

V

infe

in

T

the

cult

meet in Salt Lake City on February 2nd, to discuss the vitally important subject of rabies among coyotes and other animals, which is now ravaging five of the Western states.

As the coyote is the principal agent for disseminating rabies, it is proposed at this meeting to outline plans for his extermination. Of course with any such object in view it is necessary that the sheepmen of the West be present at such meeting, for it is well known that our western flockmasters have always done more than all other agencies combined to suppress this coyote nuisance.

In order that the western sheep industry might be well represented, the National Wool Growers' Association, at its annual convention, appointed a committee of western sheepmen to meet with these health officers and assist in formulating a plan of action. The members of this committee are: James H. Moyle, of Utah; W. N. Mc-Gill, of Nevada; Thomas Austin, of Idaho; J. D. Noblitt, of Wyoming, and F. A. Ellenwood, of California. In order that this committee may formulate a plan of action, they have called a meeting for Salt Lake City, at 2 p. m. of February 1st. All the expenses of this committee will be paid by the National Wool Growers' Association. If woolgrowers have any suggestions to make to this committee we would suggest that they present them in the form of a letter to James H. Moyle, Salt Lake City, Utah.

TO SECURE FAVORABLE LAND LEGISLATION

Those who have been reading the pages of the National Wool Grower will know that Congress is determined to dispose of the remaining public domain at the earliest opportunity, and in accord with that policy there is now pending before the present Congress not less than seven bills changing the land laws of the western states. Most of these measures provide for a homestead ranging from one section up to two sections in area, and several of them provide that those who have pre-

viously taken a homestead of 160 or fer with them upon needed land leg-320 acres may take sufficient additions lands within ten miles of their original location to make a total of acres. At the National Wool Cowers' Con-At the National Wool Cawers' Convention in Salt Lawy this land question was sheepmen present that some to the sense of the sheepmen present that some to the sheepmen present that some that the sheepmen present that the sheepmen sheepmen that the sheepmen sheepmen that the sheepmen that t felt necessary that certain recommendations should be formulated and submitted to Congress concerning the views of western stockmen. If the public domain is to be disposed of it should first be classified so that agricultural lands only will be opened to the homesteader, and that grazing lands will be leased to those who will use them for stock raising purposes. It is also essential if the West is to be settled, that provision be made for stock trails at least one mile wide leading to and from the National Forests, as well as to the railroad loading points, and it is also important that certain watering places be withdrawn from settlement, so as to be of convenience to stockmen using adjacent ranges. Last year the National Wool Growers' Association recommended that the Secretary of the Interior be authorized to withdraw these stock trails, and in accordance with that recommendation one of these homestead bills has been so amended as to provide trails one-fourth of a mile wide. It is thought, however, when the importance of these trails is explained to Congress that they will be disposed to give an area at least one section wide, if not wider.

The American National Livestock Association holds its annual meeting at El Paso, Texas, January 25th, 26th and 27th, and as the members of that Association are as vitally interested in the public land question as are the members of the National Wool Growers' Association, it was determined that the National Wool Growers' Association should send a committee of five men to the El Paso convention to conislation, and that the two committees should in turn send committees to Washington to present this matter to the Federal Congress. The committee appointed to go to El Paso to represent the National Wool Growers' Convention are: H. C. Wood, of Idaho; M. K. Parsons, of Utah; Dr. J. M. Wilson, of Wyoming; M. I. Powers, of Arizona, and W. R. Morley, of New Mexico. The expenses of this committee will be paid by the National Wool Growers' Association, as money raised for that purpose. After these two committees have determined what amendments are needed to the proposed land laws, then each association will send a committee to Washington present the matter to Congress.

In all of this public land discussion at the National Wool Growers' Convention it was clearly stated that there was not the slightest purpose to interfere with the legitimate homesteader but it was felt that since Western stockmen are now the largest users of the public domain, and if that domain Ass is to be devoted to its most useful purposes, it was certainly the duty of these dep stockmen to at least present their views upon this question to the Federal Congress, whether Congress accepted those views or not.

AS UTAH SEES IT.

I want to congratulate the National Wool Growers' Association on its magnificent convention in Salt Lake City. Certainly the meeting was the best whi one ever held by this Association, and of I doubt if any other Association has ever equalled it. This meeting will re- eas sult in a better understanding among ed sheepmen, and should bring about a determination to support not only the her National Wool Growers' Association, but the various state associations as this well.

C. B. STEWART, Utah, ima

Five dollars dues to the National dan Wool Growers Association include a year's subscription to the National ED Wool Grower.

1916.

ttees

to

r to

ittee

epre-

Con-

; M.

lson,

Ari-

Mex-

ittee

Vool

was

these

what

osed

will

1 to

Con-

there

nter-

eader

stern

rs of

main

pur-

these

riews

Con-

ional

mag-

City.

best

n has

out a

ation,

ns as

ude a

Resolutions Adopted by the 52nd Annual Convention of the National Wool Growers' Association Salt Lake City, Utah, January 15, 1916.

Non-Partisan Tariff Commission.

WHEREAS, The result of placing wool on the free list entailed the loss to our government last year of \$30,-000,000 in revenue, and

WHEREAS, It is believed it will be necessary to retain the duty on sugar and other products in order to supplement needed revenues and aid the nation in attaining a state of preparedness, and

WHEREAS, Under the free and unlimited competition with cheaper foreign labor, wool growing in this country is declining, thus making our counssion try more and more dependent upon foreign countries for our supply of clothing, which dependence in time of war would seriously impair the fighting qualities of our soldiers,

THEREFORE, BE IT RESOLV-ED, That the National Wool Growers' Association, in order to materially add to the nation's revenues and make it independent in time of peace or war for food and clothing, urgently petition congress to amend the existing tariff those laws on sugar, meats, wool and other products through Non-Partisan Tariff Commission.

Regulations Concerning Imported Animal Products.

WHEREAS, This country has recently passed through a wide-spread outbreak of foot and mouth disease. which has cost our stockmen millions , and of dollars, and

WHEREAS, This disease could ill re- easily be, and most likely was, importmong ed into this country with wool, hides, meat or other animal products brought y the here from infected countries, and

WHEREAS, At the present time this country does not require the disinfection of wool and certain other an-Utah. imal products originating in countries, in which foot and mouth and other tional dangerous, infectious diseases prevail.

THEREFORE BE IT RESOLV-ED, That we most urgently insist that tional the United States Department of Agriculture immediately promulgate regulations requiring that all wool and other animal products, imported from countries in which foot and mouth or other, dangerous animal diseases prevail, be thoroughly sterilized before admission to this country, and if it shall be found that certain of these products cannot be sterilized and rendered safe, then we insist that they be excluded.

BE IT RESOLVED FURTHER, That until such time as the United States Department of Agriculture shall require the thorough disinfection of exposed imported animal products, we petition the state veterinarian or the state livestock sanitary board in each of the states to issue a proclamation forbidding the entrance within its borders of all livestock products that may be imported from countries in which foot and mouth or other dangerous diseases prevail.

Department of Agriculture.

WHEREAS, The Department of Agriculture in its work, has been of great value to the livestock interests of the country, both to the stockmen and to final consumers.

THEREFORE, BE IT RESOLV-ED, That the thanks of this Association be tendered to the Hon. D. L. Houston, Secretary of the Department of Agriculture, and through him to the various officers and men in charge of the work and that the united efforts of this Association are pledged to the Department in the prosecution of its work for the betterment of the livestock interests and in furnishing the people a clean and pure meat, and we are with the Department in all efforts to eradicate the foot and mouth disease as well as all other diseases of animals.

Asking Flockmasters to Destroy Predatory Wild Animals.

WHEREAS, For many years the loss of sheep and lambs from the depredations of wild animals has proved a menace to the prosperity of western sheepmen,

AND WHEREAS, There exists at this time in several of the western states a dangerous disease known as Rabies, affecting the coyote, making this animal perfectly fearless and a dangerous menace to all classes of livestock and poultry, (30 head of feeding steers having been bitten in one feed yard as reported by a representative of the Biological Survey) and also a dangerous menace to all human beings, especially women and children. Thirty-three persons as reported by the same authority are now being treated at Reno, Nevada, having been bitten by affected animals.

THEREFORE, BE IT RESOLV-ED, That we urgently request all flockmasters to devote a portion of their time to the eradication of these dangerous pests, and that we petition Congress at the present session for an appropriation of \$500,000 to be used by the Biological Survey in the eradication of predatory wild animals.

Classifying Public Domain.

WHEREAS, There now remains in the western states approximately 275,-000,000 acres of open, unreserved public lands, and

WHEREAS, Most of this land is chiefly valuable for grazing and will not support a home when devoted to any other use, and

WHEREAS, Western flockmasters are as desirous as any other class of citizens of having the West developed and its lands put to their proper use.

THEREFORE, BE IT RESOLV-ED, That we, The National Wool Growers' Association, urge Congress to enact such legislation as will enable the Secretary of Interior to classify the remaining public domain into lands suitable for crop production and lands suitable only for grazing, and

BE IT FURTHER RESOLVED, That after these lands have been classified, if any be found adapted to the production of agricultural crops, that such lands be opened for settlement in tracts of such size as will adequately support a family, and such lands as are found chiefly valuable for grazing should be withdrawn from settlement and leased to those who will use them for the production of livestock.

Livestock Trails.

WHEREAS, It is necessary for the convenient and economical handling of livestock on the Government lands of the U. S. to have defined and established trails from the desert or winter grazing lands to the Forest Reserves and from Forest Reserves to railway shipping points.

THEREFORE, BE IT RESOLV-ED, That we, The National Wool Growers' Association, respectfully urge the Secretary of the Interior after consultation by agent or otherwise with the various livestock associations to cause to be set aside such unoccupied strips of Government land as will be consistent with the economical moving of livestock to and from such ranges.

RESOLVED, That we, The National Wool Growers' Association, are in favor of a broad and economic policy for the use of water for all purposes authorized by the local laws on the subject, and the development of land of the western or public land states, conforming with the long-established and sound policy of the United States as being opposed to the making of a direct revenue therefrom, beyond the expense incidental to the surveying, classification and disposing of such lands, but, on the contrary, that said policy is intended to encourage and promote the settlement and development thereof; that any interference by the Federal government, act of Congress, or any administrative interpretation thereof which is not in harmony with this policy, does an injustice to the new states by placing them on an unequal footing with the original states, and by discouraging and preventing the settlement of such new states and the development of their resources.

A Pure Fabric Law.

WHEREAS, There is now pending legislation intending to provide against misrepresentation of adulterated manufactured products of wool.

THEREFORE, BE IT RESOLV-ED, That we, The National Wool Growers' Association, respectfully request Congress to enact a suitable pure

fabric law for the protection of the American people.

National Wool Warehouse.

RESOLVED, That we, The National Wool Growers' Association, favor and recommend that the woolgrowers of this country support the National Wool Warehouse and Storage Company, and we hereby thank said company for their educational work including the fine wool display at this meeting.

Preparation of Wool for Market.

RESOLVED, That we, The National Wool Growers' Association, urge every woolgrower to use the utmost care in shearing his sheep and preparing his wool for market.

The National Wool Grower.

WHEREAS, The National Wool Grower, published and owned by the National Wool Growers' Association and the State Wool Growers' Associations, is now firmly established as one of the leading sheep and wool papers of the world, and

WHEREAS, This paper has established the highest possible standard of integrity and fair dealing, both in its editorial and advertising policy and is now invaluable to all sheepmen,

THEREFORE, BE IT RESOLV-ED, That we, The National Wool Growers' Association urgently solicit the subscriptions and active support of all flockmasters to the end that the power of this official paper may be extended even beyond its present limits.

Declaration of Principles.

WHEREAS, Conditions arise from time to time where sheepmen, and especially those in charge of sheep, thoughtlessly and sometimes wilfully trespass and graze upon ground that is occupied and used by other citizens engaged in the livestock and agricultural business, and thereby create a bad impression towards our industry, and also violate the rules of propriety and justness that should exist between man and man, and their various diversified interests.

THEREFORE, BE IT RESOLV-

ED, That we, The National Wool Growers' Association, in convention assembled, do hereby declare most emphatically against the above method and hereby make plain to the public that we stand for fair, honest and just treatment between man and man, regardless of occupation, and that we will not countenance in the least degree any unjust act wilfully perpetrated by men engaged in the sheep business, and furthermore do hereby condemn such procedure.

Our Thanks.

RESOLVED, That we, The National Wool Growers' Association, in convention assembled, do extend our thanks to the Association for the great work performed by its officers during the past year and we especially thank our president and secretary for their united efforts for the woolgrowing interests. We extend our thanks to the Western Railroads for the low rates which they have made for this convention, thereby contributing to the success of this meeting. We extend our thanks to the Commercial Club of Salt Lake City and to all the good people of Utah, and Salt Lake City, who have made our welcome so sincere and hearty. We also extend our thanks to visitors and all friends who by their presence and help have contributed to make this one of the greatest meetings in the history of the Association. We also extend our hearty thanks to the newspapers of Salt Lake City for their liberal presentation of the proceedings of this meeting.

NEVADA HEARD FROM.

There were a good number of Nevada sheepmen at the National Wool Growers' Convention, and those who missed the meeting will live to regret it. It was one of the best meetings at which I have ever been, and I did not think it possible that the average range sheepman would take as much interest in associations as he did in the deliberation of the National Wool Growers' Convention.

A. J. ANDREWS, Nevada.

Address, Preparedness For Sheepmen

By A. J. KNOLLIN, Eastern Vice-President

E hear much and see much in the papers these days on the subject of "Preparedness" as pertaining to our National policies. There is not so much difference of opinion as to whether, as a nation, we should be prepared for emergencies or not, but opinions differ greatly as to the methods to be pursued to bring us the greatest benefits.

As children at school we were taught—as our children are being taught today—to prepare the lessons assigned to us. These lessons were, of course, selected with a view of preparing us for the larger duties of citizenship which come to us in after life. In deed, it is very important in our lives, from childhood until old age, that we be prepared to well fill such position in life as we may hold.

The lessons of preparedness do not end with school days. In fact, as the sphere of our activities grows, the necessities of being prepared for the duties of life become greater. It is my purpose to talk to you today, fellow woolgrowers, upon the subject of preparedness as applying to our industry and affecting us.

However, I feel constrained to express my views briefly on the momentous question of our country's preparedness for defense. I have a feeling of abhorence for the horrors resulting from war. The loss of life is appalling, still not so distressing as the suffering of the wounded and the broken hearts of the mothers who have been widowed and the children who have been made fatherless.

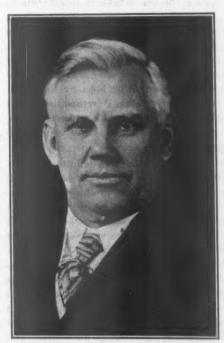
With these feelings weighing heavily upon my heart and regardless of the fact that I do not believe in war, that to my mind it is absolutely wrong that men, created in the image of God, shall be lined up to take from each other that which it is beyond the power of human agencies to restore—human life, I must hold in abeyance my feelings and consider the subject in the light of forces at work throughout the world, and in view of existing conditions I am

most heartily in favor of a broad program of preparedness. As school children or as men of affairs, we know how mortifying it is to be caught unprepared to do that which is expected of us.

Our country is today, by far, the greatest of all nations. Holding this prominency, it would be embarrassing indeed should she prove unprepared to protect her people in any emergency or to perform her full duty in the interest of humanity.

Foot and Mouth Disease.

There is nothing pertaining to the



A. J. KNOLLIN.

welfare of the livestock industry that we should be more fully prepared for than the foot and mouth disease. For the past 15 months this disease has prevailed in the East. The minds of western stockmen, who realize the virulence of this disease, have been burdened with apprehension that an outbreak would occur in the range states, realizing that in that event it would be even more difficult to eradicate it than on farms.

The first outbreak of this disease was in 1870; minor outbreaks occurred in

the early 80's and in 1902-3. In 1908 there was a serious outbreak. However all these outbreaks were confined to the eastern, principally the New England states. Up to this last outbreak I believe there had never been more than four states affected at one time. The last outbreak, starting in Michigan in October, 1914, spread rapidly into 21 states. About 3500 herds were found affected. These herds represented about 80,000 cattle and 85,-000 hogs. Some 9000 sheep and goats were slaughtered along with the affected cattle and hogs for the reason that they had been exposed, but so far as I know definitely, the disease has been confined to cattle and hogs. I understand it to be a settled fact that the several outbreaks were traced to the importation of livestock or by-products of livestock. This being true, a program of preparedness in this country against outbreaks of foot and mouth or any other contagious livestock disease, should have prevention for its basic principle.

Our Federal government should use every possible means to guard against importing infection through any source whatever, a program of preparedness to meet the exingencies that arise, should not be difficult in view of up to date knowledge obtained by actual experience. Immediate and stringent quarantine of man and beast is necessary wherever there is the least suspicion of the disease and immediate slaughter of herds where they are known to be affected.

It is by these means and by these means alone that we have quickly checked and eventually stamped out every outbreak that has occurred up to the present one, and it is now practically under control.

These stringent methods may appear, at first thought, arbitrary and contrary to American ideas of freedom, but in truth they are in accord with the American idea of freedom as expressed in the Declaration of Independence, which grants each citizen the right to

1916. Wool

t em-

ethod oublic l just n, ree will e any

men furpro-

our great uring thank their in o the

rates
nvensucd our
f Salt
ple of
have

their ted to etings i. We to the

edings

f. Ne-Wool

e who regret ngs at id not range iterest eliber-

evada.

the pursuit of his personal welfare in so far as he does not interfere with public welfare. The wisdom of this strict policy is evident in view of the well known conditions prevailing in other countries where this dire disease is doctored and permitted to run its course.

Were we to follow this system in the United States, our splendid public markets, our enormous feeding operations and our wonderful system of distributing meats would be a thing of the past.

At the recent conference held in Chicago, called by the Department of Agriculture and presided over by the Assistant Secretary, Hon. Carl Vrooman, to consider foot and mouth disease, all branches of the livestock industry and allied interests were represented, and it was proven that all interests realized the importance of stamping out the disease. The best method of so doing, however, was a mooted question at the close of the conference. While listening to the addresses and discussions thereof, and since, I have given much thought to this very important matter, and I make bold to present to you today the gist of my thoughts for your attention should you deem it wise, as l believe you will, to consider the matter of preparedness for prevention and handling future outbreaks of foot and mouth or other virulent and contagious diseases of live stock. It is of National importance that our live stock industry prosper-of as much importance to the consumer as the producer. Therefore the responsibility should rest with the Federal government, assisted by the hearty and vigorous cooperation of state and county officers, and the people. The livestock in the United States is a part of the nation's wealth and therefore the expense of protecting the livestock industry should be born by the nation. As the seizure and slaughter of animals is for the benefit of the nation, owners should be promptly paid a fair valuation of the stock confiscated, regardless of which class it belongs to-market or pure bred. Under the present system, owners of pure bred stock are only paid the meat value of the ani-

mals. We have herds of pure bred cattle and hogs and flocks of sheep which are of untold value for improvement purposes, and in so much as it was demonstrated by the preservation of the Chicago dairy show herd that valuable breeding stock can be cured and thereafter safely used for the purpose of improving our herds and flocks, the question as to whether valuable breeding stock shall be protected is purely economic and should be decided by a Federal Commission appointed for that purpose. If, in the wisdom of such commission, an infected purebred herd or flock were considered of great value for breeding purposes and the expense for the necessary quarantine to bring them to a safe useful condition was in keeping with their value and in line with the cost to exterminate, I see no reason why such animals should not be preserved, and the expense of such quarantine be born by the Federal government. Whether the plan I have briefly outlined has merit or not, the fact that I want to call your attention to is this:

We should have a definite plan determined upon in advance and a well established system of enforcing its immediate and effective operation when symptoms of an outbreak are found. It is my idea that the state should enact laws whereby the Federal government would be empowered to establish quarantines within the borders of a state as well as at the borders and take the full responsibility of suppressing as well as eradicating the disease, assisted by the state and county authorities and by the people—the working down and out as it were from a central authority. Uniform, prompt, and efficient action can be had in no other way that I see. Congress should empower the Secretary of Agriculture, if he has not already that power, to use every agency of the government available and should prepare in advance for the funds necessary to meet the expense and the payment for animals slaughtered. It is very important that the animals. slaughtered be promptly paid for in order that no unnecessary hardship be imposed upon the unfortunate owner.

In connection with the handling of the foot and mouth disease sanitary requirements were of course necessary. Cars were required to be cleaned and disinfected. For doing this, the railroads imposed an exorbitant unjust charge upon the livestock industry, i. e., \$2.50 for single and \$4.00 for double deck cars.

It is my opinion that they should keep their cars in a sanitary condition at all times, at their own expense. We are charged for on an average of over 3,000 pounds more weight than we can possibly load, yet the railroads will permit 5000 pounds of refuse to accumulate in a car which they will haul back and forth, unless it can be cleaned out at an expense to the shipper and a profit to them of 400 per cent or more.

There are certain attentions that we expect when we stop at first class hotels, one of which is clean sheets on the beds, and we have the right to expect of first class railroads clean cars for our stock. There was a time when railroads did not consider hauling livestock profitable—at least so they claimed—on account of the heavy damage claims they were obliged to pay, resulting from bad service they gave us, but now these claims are reduced to a very small amount per car owing to the splendid service rendered.

Our experiences of a quarter of a century with indifferent and inadequate railroad service, during which time enormous losses were sustained by the livestock industry, should teach us the value of preparedness. When I think about it I am reminded of a frequent recurring experience of my youthful days:

I helped a neighbor at geese picking times. The picking forces were carefully prepared beforehand—all avenues for the geese to escape were blocked and no matter how much individual and collective squacking the geese made, the feathers were plucked. Have we not, fellow sheepmen, been handled much the same way? We were not able to get away from the freight charges although our shipments of sheep and lambs lost all of their kill-

, 1916.

ing of

nitary

ssary.

d and

e rail-

unjust

ustry,

00 for

should

dition

e. We

f over

ve can

will

accu-

1 haul

clean-

er and

ent or

nat we

class

ets on

to ex-

n cars

when

g live-

claim-

amage

y, re-

ve us,

d to a

to the

of a

equate

time

by the

us the

think

equent

uthful

pick-

were

all av-

were

ch in-

ng the

ucked.

, been

? We

m the

ments

ir kill-

ing qualities en route to market and during lean years, our products, mutton and wool, scarcely brought enough to pay the freight, although intermediate agencies through which they passed, were growing financially stronger much faster than we were. I am confident that we are of one mind so far as the past is concerned-like the geese we prepared ourselves with a valuable product and like them we were regularly picked by those who were prepared to pick us. Shall we continue on, my fellow sheepmen, or shall we awaken to the fact that our reward, as producers of a most necessary and valuable product should be the larger and not the smaller portion of the profits?

Efficiency is but another phase of the subject "Preparedness." The "efficiency" idea has spread over the entire country. Applied first by large corporations and business firms, it has become the dominant factor in modern "high pressure" existence. By "Preparedness" and "Efficiency" is meant the power of producing desired results with the elimination of waste, making every stroke count. More and more sheepmen are each year applying these principals to their business. There is embodied in the efficiency idea an axiom that an added expense is often an economy. We know this to be true with reference to using the best rams obtainable. We know that by co-operation, assisted by the National Forest Service, fatter lambs are being marketed and the range is being conserved for the use of future generations, instead of being destroyed. We know that by co-operation better prices can be obtained for wool, also that by cooperation our lambs can be better distributed and marketed for a much higher average price. We know of these things, I say, and yet we do not profit by our knowledge as we should. It is high time my friends that we have a well defined plan of preparedness. Let us not be found with out lamps untrimmed and empty of oil when we are in much need of light. What are our needs? What can we do to improve our condition?-are questions

that each of us should consider from our own view points.

THE NATIONAL WOOL GROWER

However, in a general way, in my mind, we need safer and cheaper money. By safer I mean more certain, that we shall, at all times, be able to properly finance our business and not be at the mercy of capricious bankers and stringent financial conditions. The sheep industry is passing through the most rapid and greatest evolution in its history. Sheep can no longer be handled without preparedness in the way of lands on which to grow feed for winter and to graze in the spring and fall. In many sections the lambing range has been taken up which necessitates the building of sheds for early lambing. It is absolutely necessary that money may be had for longer periods than six or twelve months to enable us to make the permanent investments necessary to meet the conditions confronting us. As our investments increase, as they have by increased values of sheep and increased investments in land and equipment, the matter of cheaper money is of considerable importance. The difference between six and twelve per cent on a loan of \$1 or \$2.00 per head on our sheep was considered of little importance but when our indebtedness on land and sheep aggregate \$10.00 per head, it becomes indeed burdensome. The fact that we must now prepare winter feed, and that we must, to a considerable extent, shed lamb, eliminates a large element of risk and gives the industry a stability that entitles it to a lower rate of interest. We should zealously guard the credit of our industry for a business is indeed handicapped when discredited.

Another need of importance is strong selling agencies. It is not to our advantage to have competition in selling our products. In order to bring about the desired results it is absolutely necessary that we have co-operation. If we would obtain full value for our products we must be prepared to demand it and if necessary to back up our demands with actions that will bring results. This need is very important—I will but touch on the subject as I know

it will be ably discussed by others. I will say this, however, a few of us have made a start in the right direction in our National Wool Warehouse and Storage Company, but in order to become a forcible factor in the marketing of our wool, this company must have the backing of the woolgrowers of the United States.

Being mindful of the importance of this, our greatest effort to better our condition by being strong enough to prevent our being picked, I cannot understand why a single woolgrower holds back a moment from joining the company. The organization is strong in every way, it has a splendid credit—in brief it is amply able to finance the entire wool clip of the United States. It is also able to assist the growers in preparing their wool for market in a manner creditable to a great industry and a great nation.

I am confident that in time, the men who have stood by the wool warehouse from start to finish will be considered great benefactors to our industry. The principles underlying the formation of this company are right, therefore it will survive even the indifference of those whose interest it is intended to protect and will progress over every obstacle.

In closing I ask your attention for a few moments to the present conditions affecting the sheep industry in the United States, this being but another phase of the subject "Preparedness" because we need more sheep and should consider how they may be increased, and also having to do with eastern conditions.

As Eastern Vice-President, I must devote a portion of the time allotted me at our annual conventions to present the conditions prevailing east, and in fact, sheep on farms is a topic that is becoming of interest to many settlers in the range states.

The conditions affecting the sheep industry in the U. S. of primary importance are the exceptionally high markets for mutton and wool, decreasing supplies and the increasing population to be supplied with food and clothing. The only condition that

could adversely affect our market is the importation of foreign mutton and wool. By this I mean that in my estimation the future growth of population in the U. S. will keep apace with any increased production of sheep that we may expect for many years. It is true we have room in the U.S. for many times the number we have now, but our farmers generally will not devote to sheep the attention necessary to success. However, such hope as we may have for increased production must be made on the farms. The western ranges are being curtailed each year by the farmers. The larger part of the remaining sheep range in the west is under government control and is, at present, fully stocked. I am a believer in sheep on the farms. A flock of fifty ewes can be maintained on the average quarter section farm, largely upon provender that otherwise would go to waste, but in order to conserve this feed the farm must be fenced securely. Great watchfulness is necessary against depredation of dogs and in many localities in the east and in all parts of the west, wolves and coyotes are troublesome. It is a common practice on farms where sheep are kept, to pasture them on rough and timbered land; flocks so pastured become infected with stomach and other intestinal worms, for which as yet, no satisfactory remedy has been found. Farmers of the future who will handle sheep successfully will cultivate the lands upon which their sheep pasture and follow a regular crop rotation, by this soiling process not only can sheep be kept thrifty but the land itself be enriched.

It is a time honored theory that sheep will live anywhere and on anything. I wish I could for once and all time nail this false idea to the barn door along with a few hides from sheep killing dogs and coyotes. Of the two evils the former is by far the more serious. It is a curse that has been wished upon the industry and a false idea which loses thousands of dollars for our stockmen each year. I wish to impress upon you the fact that sheep are delicate, sensitive animals requiring

not only intelligent care, but proper food. Sheep are not essentially scavengers; true they will clean the weeds from the fence corners, browse on brush and brambles, glean stubble and stock fields, and in short pick up odds and ends wherever given access to these, but it too often follows that when the gleaning is done there remains only the cockle burrs that have been harvested and stored in their fleeces. When they must pick these off from one another to exist, supplemented by the tough fiber of the milk weed, barnyard manure piles, and winter scenery, we cannot expect them to please our eye with their appearance nor to produce surplus mutton or wool for the nutriment and comfort of humanity that would be asking too much. When sheep are turned out to shift for themselves, bad luck is a close neighbor.

Although there are many methods by which sheep on the farms may be properly cared for, no best way, considering the varying conditions has, to my knowledge, ever been scientifically established.

On the average eastern farm western sheep or lambs (lambs preferably because of greater gain in proportion to the food consumed and a higher market value for the gain) can be fattened, or a bunch of western ewes will raise one crop of lambs, and then the ewes can be fattened and sent to market, but it is not every farm that is adapted to permanent sheep raising, by this I mean keeping a breeding flock. Permanent flocks to continue thrifty, year after year, must not be pastured a season through on permanent pasture-they must not be kept on low wet land, neither do they thrive on pasture that burns up in summer. Succulent feed is the natural diet of sheep. Concentrates are never required when the natural foods are ideal. In the early spring, at lambing time, a mixed pasture of blue grass, orchard grass and clover, fits the ewes for maternity and affords an abundance of milk for the lamb. Should the season be favorable for grass to mature, ewe and lamb will thrive on the grass alone.

Should the season be wet and the grass what we term "washy" a bit of bright alfalfa or clover hav in the racks at night or a light food of grain should be supplemented. During the heat of summer, dry pastures can be supplemented by alfalfa, oats and rape, either pastured or cut and fed in racks; the latter method of course preferable. Clover sown in wheat and oats makes splendid grazing and all the otherwise wasted grain is gleaned. In the fall, when the grasses are growing again, as is common in the east, the mixed pastures with a run of the corn fields after husking will take the flock well into the winter. The same results can be obtained in the west by gleaning stubble and wheat fields. There are various ways in which sheep can be properly cared for, but emphasis can not be too strongly placed on the words "properly cared for." It is wonderful how quickly a very ordinary, in fact common, ill bred sheep will respond and take on a respectable appearance under good management and what a sorry appearance purebred sheep assume when neglected. I hold very strong rooted opinions grown so from observation, that there is scarcely a county in the whole United States where sheep will not do at least fairly well with proper care. On the other hand I am just as firmly decided that there is no section of the country where sheep will do well without proper care. Under the subject of environment I will touch for a moment the rather delicate question of breeds. I know from actual personal experience that every true shepherd loves his chosen breed frequently to the extent of relegating all other breeds to the scrap heap as it were. When truth is diligently sought with an open mind it is generally found and the facts are there is a place in the world's economics for a variety of grasses, trees and animals. The different breeds of sheep have qualities that make them valuable for certain purposes and are better suited for certain environments. I regret being unable to impart information of value on this angle of the sheep industry. It is an unsettled question, 916.

rass

ight

s at

ould

it of

ple-

ther

the

able.

akes

wise

fall,

gain,

ixed

ields

well

can

ning

are

n be

can

ords

erful

fact

pond

ance

at a

p as-

very

from

ly a

tates

airly

other

that

intry

pro-

nvir-

t the

s. I

ience

his

xtent

o the

th is

mind

s are

cono-

s and

sheep

uable

etter

I re-

rma-

sheep

stion,

one that in time will be worked out by economic necessity as it has been in the United Kingdom of Great Briton where sheep are counted upon to pay the rent. In England, many different breeds of sheep have been localized and good reasons are advanced for the better adaptability of each breed to the different environment. Our Agricultural Colleges, also our Federal government are giving some attention to this subject; however, their limitations make it absolutely necessary that they have the co-operation of the farmers in order to arrive at valuable conclusions. The Agriculture Extension service we might liken, if you please, to a modern printing press having within itself possibility of doing a useful work, but it is necessary to do more than set the machinery going-the news must be gathered, the type set up, paper and ink supplied and the completed paper distributed before we obtain results and as the extension work of our agricultural universities represent the machinery for promoting useful knowledge, the people interested must bring their experiences, their products, animal and vegetable, to the attention of each other in order that from the whole the chaff may be separated, and the useful results obtained, made the possession of all.

There is yet one other angle of this subject:

"The probable future demand for mutton."

I will say in no uncertain tone that it will continue to grow apace even in greater proportion for the next quarter of a century than for the last. In 1884 I had about 1700 head of sheep on the Chicago market in one day, the total receipts were about 4000—the eastern buyers were out of the market as trade east was bad, therefore, the city butchers had no competition, they took their time to buy and it required the greater part of the week for my commission man to clean up my consignment. When he bade me good bye, he said, "young man, don't you ever ship so many sheep in at one time again." The total receipts for the year 1884 were 801,630 head, equal to about 3000

every market day. In 1914 Chicago marketed in round numbers five and one-third millions equal to 20,000 each market day. The sheep business on many other markets has developed in equal proportion during the last 25 years. However, with this wonderful record in mind, I will say again that I am confident we will see even a greater increase in mutton consumption during the next quarter of a century.

There is no more palatable, healthful nor more convenient meat than mutton, our people are only now finding it out. During the past year cattle and hogs have been comparative-



F. J. MIRACLE, Tressurer

ly low, while sheep have been the highest ever known. This is ample proof that mutton has at last come to be appreciated by our people.

In advocating sheep husbandry on farms, it is best to arouse cautious interest rather than enthusiasm without foundation, for an inexperienced man who makes a failure of the sheep business becomes a knocker instead of a booster.

I am of the opinion that a small flock of sheep properly handled on every broadly managed farm will earn a good profit. Further, and very important in these days of soil conservation, is the matter of manure. The manure of the sheep is particularly valuable because of its composition and concentration and the eveness of its distribution, and finally we may consider together the place of the sheep in the scheme of general farming and the utilization of the feed raised on the farm, A balanced farm is not limited to one class of livestock but several-not one crop but many. The sheep fits into its place with the cattle and hogs naturally and easily and will earn a good profit, and when the fundamental conditions of successful sheep husbandry are understood, the problem of more sheep will solve itself.

It is through co-operation that legislation helpful to sheep raising will be enacted. To bring this point home to you, I will state plainly that a uniform "dog law" throughout the eastern states is badly needed. The west is fast being settled by farms and will have the same need, and at present a uniform bounty for predatory animals is badly wanted.

The thing to do, however, is to forget for the present about "more sheep" and instead talk "better sheep," better methods, better education, fewer dogs and coyotes, more interest and more complete co-operation. When we have obtained success in these fundamental things, the question of "more sheep" will take care of itself.

IDAHO WELL PLEASED.

I think that all sheepmen can well be proud of the fifty-second convention of the National Wool Growers' Association. Idaho was represented by a large delegation, and I think no one regrets having been with you. The meeting was certainly one of the best and biggest ever held in the West, and it looks to me as if sheepmen have at last found out that they can well afford to maintain woolgrower' organizations, both state and national. I shall always be proud that I was a member of this convention, and I am very proud of the delegation sent by the state of Idaho.

HUGH SPROAT, Idaho.

Address, Poisonous Plants In Relation To Sheep

By DR. C. D. MARSH, Washington, D. C.

ROBABLY one of the heaviest sources of loss to sheep men of the West, is poisonous plants. In fact it is doubtful if any other one cause detracts so much from the profits of sheepmen. Disease and animal parasites cause certain losses, and predatory animals get a few sheep, but in the aggregate there is little doubt that the heaviest losses that occur are occasioned by the poisonous plants of the range. While there are a large number of plants that produce more or less harm, without doubt the heaviest losses are confined to the effects of a very few plants. In the short time at our disposal we can only briefly touch on those that may be considered the most important. So far as sheepmen are considered, without doubt, two plants cause heavier losses than any others, and perhaps, are more widely distributed than any others. One of these is Zygadenus or Death camas. Death camas is distributed very widely in the sheep grazing regions and is found in several species. So far as we know, all these species are poisonous, but without doubt, the greatest harm is caused by the one which grows at comparatively low levels. It is not unusual for fifty or one hundred or two or three hundred sheep to die at one time from this plant. These deaths occur

very largely in the spring of the year, more particularly in the months of May and June. The symptoms include nauseau and trembling with unusual sensitiveness. The animals sometimes die suddenly, but perhaps more frequently linger along for two or three days or a week. The heaviest loss that has come to our attention from this plant was one in the state of Washington last year where two-thirds of a band of sheep died within forty-eight hours. The other plant which is especially destructive to sheep is the Lupine. There are a great many kinds of Lupines, and so far as we know, all are poisonous. The seeds and pod are particularly injurious. It is rarely that sheep die from eating the leaves and stems, but very heavy losses have resulted from eating the pods, which were full of seeds. These losses occur mostly in the later part of the summer, more perhaps in the month of August than at any other time. The Lupines, too, are scattered very widely over practically all the sheep ranges of the West. There are other plants which are destructive, but within a more limited area, like the Laurels in the mountains of California, and like the Sneeze weed which we have recently found to be very destructive in portions of Utah. This Sneeze weed, by the way, is still under investigation and may be found to be a much more important source of loss than we have hitherto supposed. The practical question of reducing these losses is a very difficult one and resolves itself very largely into a matter of prevention. There are no remedies that can be used effectively in a practical way to cure the sick animals. Theoretically, this could be done. Practically, under range conditions, it has been found to be impossible. Reliance must be placed upon prevention. Sheep do not eat poisonous plants as a rule, as a matter of choice. Generally speaking it is only hungry animals that are poisoned by these plants. The obvious remedy then is to make cer-

tain that whenever sheep come in con-

tact with poisonous plants they are not To this end, particularly hungry. when sheep are driven over a poison-, ous plant area, care should be taken to see that they are well fed before starting on the trip. If sheep have to be unloaded from the cars in an area where poisonous plants are common, it is much the wisest way to feed them before they are turned loose to graze. Very many of the heaviest losses of sheep have occurred because hungry sheep were turned loose from the cars upon an area covered with poisonous plants. It follows, of course, that in handling sheep it is much better that they should be grazed in loose order. The bedding out system or blanket system of handling sheep which is so strongly recommended by the Forest Service, if followed consistently, will reduce the losses from poisonous plants, for many cases have occurred of animals being poisoned in going back and forth to the bedding ground. As a general principle, it is much better that grazing animals should be drifted rather than driven. Whenever driven, they are very likely to snatch at the first material they can get, and use very little discrimination in feeding. It follows, of course, that narrow restricted driveways in which there is no food, should be avoided so far as possible. Such driveways, of course, in many regions are a necessity, but wherever they can be done away with, it is much better for the sheep, for if upon these driveways there is any poisonous plant, they are almost sure to get it, or on emerging from such a driveway, if they come upon an area covered with poisonous plants, They frequently fill up rapidly and with consequent heavy losses. Generally speaking then, the way to reduce the losses from poisonous plants is to recognize them and avoid the losses by careful handling of the animals themselves.

Every Western wool grower should pay \$5.00 to the National Wool Growers' Association.

SAVE YOUR LAMBS!

One lamb will pay for a dozen copies of Total Per Cent Lambing Rules. Inexperienced help will save you 5 to 15 per cent more lambs when provided with these rules. Useful dur-ing other seasons of year.

Fifty Cents per copy, postpaid.

Address

TOM BOYLAN. Rock River, Wyoming

FULL MARKET FOR SHEEP PELTS

We are the only strictly commission house in Kansas City, so in order to get full market prices for Wool and Sheep Pelts, consign your shipments to us. Shipments sold on the Open Market on their Own Merits. Quotations gladly furnished. Correspondence solicited.

C. J. MUSTION WOOL COM. CO. denesce St., Kansas Opposite Stock Yards.

BEST MEETING EVER HELD.

I have attended many conventions of various kinds during the past fifteen years, but I want to say frankly that the last National Wool Growers' Convention is the best and biggest convention that it has ever been my fortune to see. Not only was the convention big in point of numbers, but the work done was simply excellent, and everyone present at the meeting so expressed himself. I am sure the convention has done much good, and must lead the way to a bigger National Wool Growers' Association.

J. N. BURGESS, Oregon.

FROM WESTERN WYOMING.

You had a big convention and one that will result in much good to the

SHROPSHIRE

bred to the very best bucks obtainable for sale in lots to suit purchaser. All stock recorded.

L. M. HARTLEY, Pine Ridge Farm, SALEM, IOWA

sheep industry of the West. No one could have attended this meeting of stockmen without having obtained a vast amount of information that is valuable. Wyoming had a good delegation out, especially from that territory along the Union Pacific Railroad, but had it not been for heavy snow fall, we would have been present in even stronger numbers.

J. D. NOBLITT, Wyoming.

FOR SALE

The O.C. Ranch

1334 Acres of Deeded Land, 3,600 Sheep, Horses, Cattle, Forest Reserve Grazing rights, Winter Range, a complete plant running in first-class

Offered at a bargain. Write for particulars to STATE BANK OF DIL-LON, Dillon, Montana.

FOR SALE **BIG SHEEP and CATTLE** RANCH

On account of ill health of one of the members of our firm we are offer-ing the best stock ranch in west for

On account of Ill health of one of the members of our firm we are offering the best stock ranch in west for sale.

It is a well known fact that the Yakima country beats the world for heavy wool production, fat lambs, and the quality of its sheep and cattle.

We have decided because of reason above mentioned to sell our 45,000 acres of deeded land which with three times as much more range leased from the state and in the forest reserve makes up our ranch. The price is \$6.00 per acre for the deeded land, one-half cash and balance on liberal terms; 2,000 head of cattle and 25,000 head of sheep will be sold with the ranch if you want them at market prices.

This ranch borders on the Columbia River on the east, elevation 450 feet and its western border has an elevation of 6,000 feet, and as we own or lease all the intervening land, our summer and winter range joins and it is mearly all under fence, there being about sixty miles of fence on the ranch. There is also over 60,000,000 feet of standing timber. A large number of springs and creeks together with the Columbia River furnish an abundance of water available on all parts of the ranch.

On this ranch there are improved farms with good buildings, also several sections of excellent grain land.

Game and fish are plentiful and gas launch, ferry boat, splendid saddle horses and everything that goes to make life worth living, are all here.

This ranch is in the hands of no real estate agent. Deal direct with us.

E DIPPING KILLS ALL TICKS

Prof. Swingle, in Wyoming State Experiment Station Bulletin, entitled "Eradication of the Tick," says:

> "I have seen large flocks of sheep practically if not entirely freed from ticks by a yearly dipping in Cooper's Powder Dip.

Use Cooper's Powder Dip—one dipping will kill the ticks and prevent fresh attacks. The protection against fresh attack is worth the cost of the dipping.

Used everywhere. Most Governments endorse it.

Write for Service Bulletin-"The Sheep Tick" -FREE-to

WILLM. COOPER & NEPHEWS 152-154 West Huron St., CHICAGO, ILL.

Utah Distributing Agents: Salt Lake Hdwre. Co., Salt Lake City Montana Branch: C. F. Wiggs, Manager, Billings California Distributing Agents Hunter-Johnson Company, San Francisco, California



not end. ison-, en to tarte unhere

ı beraze. es of ngry cars nous at in

it is

that rder. inket is so orest will

nous

ed of back .As etter rifted iven,

t the very t folricted food, sible.

rever much these plant, or on

y re-

poisill up heavy n, the

they

oisonand ng of

hould Grow-

DRY LAND FARM INVESTI-GATIONS.

The following is taken from the annual report of U. S. Department of Agriculture:

"The agricultural development of the Great Plains lying between the 98th meridian and the eastern foothills of the Rocky Mountains presents one of the greatest agricultural problems of this country. Owing to the fact that these plains consist mainly of fertile land, capable of producing large and profitable crops of most of the staple crops during seasons of sufficient rainfall, but that these favorable climatic conditions can not be depended upon, this region has been the scene of unremitting agricultural effort for a period of nearly forty years. These efforts have involved enormous losses in the shape of broken fortunes, deserted farms, and ruined homes. Probably nowhere else on the North American continent has there been so large a number of people hopelessly ruined by agricultural efforts as in this region. It would seem that this enormous loss ought to have been compensated for, in a measure at least, by the accumulated experience of these pioneer farmers, but this fund of accumulated experience is woefully meager.

"The experience of individual farmers, who kept little or no record of their operations or the results from them, and who were consequently not prepared to trace the connection between cause and effect, and whose experiences have been an alternation of phenomenal yields, in favorable seasons, obtained by even the crudest and most unscientific methods, with total crop failures following the most approved methods, does not constitute a safe basis for reliable conclusions. These conditions have, however, afforded opportunity for the exploitation of many theories, methods, and systems of farming and have been taken advantage of by selfseeking adventures and land speculators who have enticed settlers into these regions by holding out hopes to them that through some newly discovered method success was assured. Ex-

perience has shown that none of these systems were effective in overcoming the effects of severe and long-continued droughts.

"It became apparent to the department investigators many years ago that it would be necessary to undertake some extensive and thoroughly coordinated and systematic investigations in this region for the purpose of collecting facts that would constitute a basis for correlating the factors of seasonal climatic conditions, cultural methods, soils, crops, and yields. It was not, however, until July 1, 1905, that definite measures were taken to put this plan into operation, and the office of dryland agriculture investigations was then established. The work of this office has developed steadily since that time until it now has twenty-three stations in the great plains, where these investigations are being carried on. An immense amount of valuable data has been secured and seven publications have been issued within the last year dealing with these problems. The conclusion drawn from these investigations may be briefly summarized as follows: This entire region is capable of supporting a permanent and profitable agriculture, but this will be accomplished by reducing the cost of production rather than by increasing yields by any new system of cultural methods; by making livestock production rather than grain raising the major farm enterprise; and by carrying over the surplus crops of favorable years to supplement the scanty crops of unfavorable seasons rather than by depending upon intensive systems of cultivation to overcome the effects of droughts."



. One of My Stud Rame

CALIFORNIA RAMBOUILLETS

My Rambouillets are large, smooth and well covered with heavy fleeces of long white wool. They are bred in a high, dry country and are very hardy. I have 2000 one and two-year-old rams for this season. If you visit the Fair, call and see my flocks. My prices are reasonable and my rams will suit the range country.

CHAS. A. KIMBLE, Hanford, Cal.



One of My Stud Ewes

AN ATTRACTIVE PAMPHLET.

We have received from the American Shropshire Registry Association an excellent booklet devoted to the interest of Shropshire sheep.

It is very nicely gotten up and contains many excellent halftones of leading Shropshires.

Why not pay your dues NOW?

, 1916

oming tinued

epart-

ago

under-

nly co-

estiga-

ose of

itute a

of sea-

meth-

as not

efinite

s plan

f dry-

s then

office

t time

ations

inves-

An im-

ta has

ations

t year

e con-

gations

llows:

sup-

ole ag-

olished

luction

by any

ds; by

rather

rm en-

ne sur-

upple

rorable

g upon

on to

severe

LET.

Amer-

ciation

the in-

d con-

f lead-

V?

The Boston Wool Market

By OUR BOSTON CORRESPONDENT

HAT prosperity has ruled in the Boston wool trade during most of the year 1915, is the testimony of leading members of the trade. Not that individual houses have made excessive profits, but there is a wider distribution along the "Street" than usual, more houses sharing in the profits than in previous years. This has resulted in spite of many adverse factors, such as embargoes, increased costs of importing wool, and extreme high prices ruling all over the world. It is a matter of congratulation to the wool trade here that this prosperity has been extended to the wool growers of the West, and latterly to the wool manufacturers of the country. The latter have their plants working nearer full capacity than ever before known in the history of the industry, the year closing with less idle machinery than for many years.

Strong points in the present situation are the small volume of wool left in the country, the small stocks of domestic wool at the seaboard, the war conditions prevailing at home and abroad, and extreme prices in London and in all foreign primary markets. Reimposition of the embargo on the exportation of crossbreds from the United Kingdom and New Zealand during the past month, will have an immense effect in strengthening the position of the holders of wool, though this action was not taken until American buyers had secured liberal supplies of crossbreds, where last season, scarcely anything was forthcoming. Until the holiday season arrived, considerable activity was noted in the local trading, with the result that December has been a satisfactory month to the sellers of wool.

It is true that they have not been able to get all they expected or desired for their wool, but the tendency has been generally upward, though in this particular Boston has lagged behind foreign markets. It has been commonly remarked that sellers are letting their wools go at less than the replacement cost, this being especially

applicable to the best imported stock. Quotations at Sydney just before the closing on December 16 for the holidays indicated a scoured cost laid down here of 64 to 85 cents for best 64s to 70s, 78 to 80 cents for good shafty 64s, and 70 to 72 cents for topmaking wools. At Melbourne, good warp 64s to 70s sold at a clean landed cost of 80 to 85 cents, with ordinary combing at 75 to 78 cents and topmaking wools at 70 to 72 cents. Geelong reported all grades of combing and crossbred wools firm and advancing at the close. Sydney will reopen January 17, with probable offerings of 250,000 bales, and Melbourne will reopen on the the same day, the probable offerings at both Melbourne and Geelong being estimated at 130,000 bales,

Compared with these figures, some of the quotations prevailing in this market seem low. For instance, good shafty 64s to 70s are selling here at 80 to 82 cents, and best warp 70s at 83 to 85c, with good shafty 64s and combing at 78 to 80 cents, and topmaking wools at 73 to 75 cents. England declared the embargo on crossbreds on again about the middle of the month, but as a matter of fact it is doubtful if any licenses worthy of note were issued during the whole of the month. The British War Department declared that no more crossbred wools could be spared from the United Kingdom. It appears that the Bradford topmakers were caught napping, and that they were astonished and chagrinned at the fact that the best wools were slipping away without any serious break in prices appearing, as was confidently expected. English papers were enlisted in the fight, a recent number of the London Times accusing American buyers of buying and storing large blocks of wool for German account, to be delivered after the war.

This action of England in shutting off the supply of crossbreds from the United Kingdom was later supplemented by similar action by the New Zealand authorities. This renewal of the



One of Our Stud Rams

NOTICE!

We desire to advise the public that we have sold every ram we had to offer last season. Our sales last year were 1000 Yearling Rambouillet rams, 400 Lincoln-Rambouillet rams, 350 Hampshire ram lambs.

For next season we will have an elegant lot of Rambouillet and Lincoln-Rambouillet Yearlings.

Cunningham
Sheep &
Land Co.

Pilot Rock, Oregon

The New Zealand Romney Marsh Sheep Breeders' Association



Flock Masters of America Attention!

The New Zealand Romney Stud flocks can supply your demand for rams and breeding ewes.

Our Romneys hold the World's Championship

The climate and country make them suitable for all parts of the union.

Flock owners visiting the Panama Exposition should make a point of inspecting the ROMNEY SHEEP from New Zealand.

Correspond with the Association for full particulars. Write today.

ERNEST J. WACKRILL, Secretary P. O. BOX 40 Feilding, New Zealand

N-Z. Romney Marsh Sheep Breeders'
Association (Incorporated by Charter)

embargo was made operative from December 27, the only question remaining to be settled being how much of the wool already bought for American account will be allowed to be shipped. According to the latest cables available at the time of this writing, the representative buyers in New Zealand were endeavoring to secure more favorable action from the Dominion authorities, and it was hoped that at least they would be permitted to ship the nearly 100,000 bales already bought. As late as December 22, at the Dunedin sale held on that date. Americans were buying freely and seemingly were confident of securing licenses to ship.

South American advices of recent date are of a disquieting nature to those who have been hoping that any lack of crossbreds from other sources would be made up from that direction. Prices are again at topnotch, with buying for account of German houses so keen that Americans are able to get very little wool at figures that will allow it to be turned over at a profit in this country. Therefore, it is reported that the Boston buyers are coming home, having bought much less wool than last year. Still there will be no lack of foreign wool during the first part of 1916, as about 15,000,000 pounds are said to be on the way to this country from various sources. Canal slides have interfered with direct imports from Australia, but the wools so diverted are arriving, either at Pacific Coast ports or by the way of the Straits of Magellan or the Cape of Good Hope.

It is a notable fact that Boston absorbed during 1915 the enormous total of over 238,600,000 pounds of foreign wool. At least this is result to be obtained by an examination of the figures compiled by the Boston Chamber of Commerce. Stocks of foreign wool at the beginning of the year were 1,957,-973 pounds; imported during the year, 247,914,385 pounds; stock at the end of the year, 11,203,962 pounds; total sold, 238,663,296 pounds. When to this is added a net absorption of 162,088,546 pounds of domestic wool, or a total of both domestic and foreign of 400,751,-842 pounds, some idea of the value of

Boston as one of the great distributing wool markets of the world may be gained.

While sales of foreign wool have overshadowed domestic grades in recent trading, there was a distinctly better feeling in the latter at the end of the year. Values were slowly advancing, and in some cases reached a point where some impression was made on the consigned wools held out of the market previously. For instance, in the last half of December, the leading warehouse company sold some good blocks of Montana fine and fine medium and crossbred wools, the scoured cost being estimated at 73 to 75 cents. These transfers aggregated 500,000 pounds or more. Other transfers for the month included about 350,000 pounds in the original bags at 68 to 70 cents clean; 75,000 pounds original Wyoming at 24 cents, or 69 to 70 cents clean; original New Mexico, etc., at 24 to 26 cents, or 67 to 68 cents clean; 100,000 pounds Wyoming eighths-blood at 29 cents, or 70 cents clean; Soda Spring quarter-blood at 34 cents and half-blood at 30 to 31 cents: Montana fine staple at 27 to 29 cents, or 75 cents clean; half-blood at 30 to 32 cents, or 73 to 75 cents clean and fine clothing at 25 cents, or 70 to 72 cents clean; about half a million pounds of fine Territory at 22 to 24 cents, or 67 to 68 cents; 200,000 graded Wyoming at 70 cents clean for fine and halfblood and 68 cents for three-eighthsblood, 200,000 pounds original Territory at 21 to 231/2 cents, or 68 to 70 cents clean.

At the end of the year, scoured values of Territory wools show substantial advances, though the attitude of manufacturers has been rather disappointing until very recently. Fine staple Territories are quoted at 73 to 75 cents, half-blood staple at 71 to 73 cents, three-eighths-blood staple at 68 to 70 cents, quarter-blood staple at 66 to 68 cents, fine clothing at 69 to 72 cents and fine medium clothing at 66 to 68 cents.

Since the bulk of the remaining wools were cleaned up in Ohio, increased interest seems to have been shown 1916.

outing

av be

have

in rey betnd of

lvanepoint de on of the ce, in ading

good

e me-

coured

cents.

00,000 rs for

50,000

to 70 riginal

cents

tc., at clean;

three-

cents at 34 cents; cents, 30 to n and to 72

ounds its, or

Vyom-

d halfghths-

Territo 70

ed val-

bstan-

ude of

disap-Fine 73 to

to 73

at 68

at 66

to 72 at 66

aining

ncreas-

shown

HE ONLY PAINT THAT SCOURED PERFECTLY."

Wyoming Experiment Station Bulletin 03

Kemps Australian Branding Liquid-Most Practical Brand for the West-Goes Further Than Crude Brands-Lasts From Shearing to Shearing-Scours Out.

ASK ANY WESTERN MERCHANT

Write for Special Booklet Giving Opinion of Woolen Manufacturers Regarding Linseed Oil and Lamp Black Brand

SOLE MANUFACTURERS

WILLM. COOPER & NEPHEWS, Chicago, Ill. PROPRIETORS COOPER'S SHEEP DIP.

Utah Distributing Agents, SALT LAKE HARDWARE CO., Salt Lake City Washington and Oregon Distributing Agents, CENTRAL DOOR & LUMBER CO., Portland, Oregon Central Texas Distributing Agents, WOOL GROWERS' CENTRAL STORAGE CO., San Angelo, Texas
California Distributing Agent: HUNTER-JOHNSON CO., San Francisco, California
Montana Branch, C. F. WIGGS, Manager, Billings, Montana

Best Liquid Dip



Bozeman, Mont, We used Cooper's Fluid Dip a few years ago and, as I remember, it very satisfactory. It killed the sheep tick and left the animal in a was very satisfactory. It very nice, clean condition.

MONTANA AGRICULTURAL COLLEGE & EXPERIMENT STATION.

By PROFESSOR R. W. CLARK.

Cheyenne, Wyo. For a number of years we have used Cooper's Fluid Sheep Dip. At for a number of years we have a dilution of one gallon to 200, it destroys all the ticks; that's what we dip for here. We consider Cooper's Fluid the best liquid dip.

WARREN LIVE STOCK CO.

W. W. GLEASON, Manager.

During the past six years I have dipped about 400,000 sheep, and during this time Cooper's Fluid Dip has given absolute satisfaction against Scab. It's certainly all you claim, and has been a money-maker for me. I find it far superior to any Coal Tar Dips I have ever used. ARCHIE ANDERSON.

Be Sure It's Cooper's Then Dip

STOCKS CARRIED THROUGHOUT THE WEST.

Parowan, Utah. I prefer Cooper's, as it is the Dip for ticks, and I never have had any Scab in the country since I have been acquainted with the Fluid F. L. CULVER.

152-154 West Huron St., CHICAGO, ILL.

California Distributing Agent; HUNTER-JOHNSON COMPANY, San Francisco California

Utah Agency SALT LAKE HARDWARE CO., Salt Lake City, Utah Montana Branch-C. F. WIGGS, Stapleton Block, Billings, Mont.

Mr. Sheepman

The NEW GRAND Hotel

at the corner of Main and South 4th Street, has opened the finest club room in Salt Lake City, for the breeders in intermountain country. Call and inspect.

Pool, Billiards, Salesrooms and up-to-date luncheon at all hours and most reasonable prices.



Leading Implement and Hardware Dealers

WOOL GROWERS SUPPLIES
At 50 Places in Utah and Idaho

Mention the National Wool Grower

ATTENTION WOOL GROWERS!

SALTER BROS. & CO.

Wool Brokers

216 SUMMER STREET BOSTON, MASSACHUSETTS

Solicit wool shipments for direct sale to the mills. Always sold subject to shipper's consent. Liberal advances, Best of references.

HOTEL UTAH

SALT LAKE CITY

ROOMS WITHOUT BATH \$1.50 AND \$2.00 PER DAY WITH BATH \$2.50 AND UP

"The very best of everything at sensible prices"

CULLEN HOTEL

SALT LAKE CITY, UTAH FRED J. LEONARD, Mgr.

Headquarters for Sheepmen

More Sheep bought and sold in the Cullen Hotel than in any hotel in the United States.

Rates \$1.00 and up.

FARNSWORTH, STEVENSON & COMPANY WOOL MERCHANTS

Consignments Solicited

116-122 Federal Street

BOSTON

J. C. LYNCH, President

W. F. EARLS, Cashier E. A. CULBERTSON, Asst-Cashier DeWITT KNOX, Asst. Cashier GEORGE G. KNOX, Asst-Cashier

United States Depositary

The National Bank of the Republic

Salt Lake City, Eltah

Capital Surplus and Undivided Profits Deposits \$ 300,000.00 373,500.00 4,512,000.00

We make a specialty of caring for the banking business of the Woolgrowers of this Intermoutain Country and point with pride

WE WANT YOUR BANK ACCOUNT

in fleeces in this market. Three-eighths-blood combing wool has sold at 38 cents, the top price of the season; another lot selling at 37 cents, with fine washed delaine at 35½ cents, quarter-blood combing at 36½ cents, fine unwashed delaine at 27 cents, three-eighths-blood baby combing at 34 cents, half-blood combing at 35 cents, and a large line of three-eighths-blood clothing at 32½ cents. Quarter-blood Michigan has sold at 36 cents.

Current quotations on fleeces in this market are 35 to 36 cents for fine washed delaine, 32 to 33 cents for XX and above, 30 to 31 cents for X wool, 30½ to 31½ cents for fine unwashed delaine, 27 to 27½ cents for fine unwashed delaine, 35 cents for half-blood combing, 37 to 38 cents for three-eighths-blood combing, 36½ to 37 cents for quarter-blood combing, 30 to 32 cents for half-blood clothing and 32½ to 34 cents for three-eighths-blood clothing.

New Texas fall wools are moving slowly at 52 to 53 cents, clean, Twelvermonths' wool is well sold, the current quotation scoured being 67 to 68 cents; with eight-months' quoted at 60 to 62 cents. There is considerable of the latter grade left unsold.

Scoured Territories have sold with some freedom, but the supply is light. Latest quotations are 66 to 68 cents for fine and 63 to 65 cents for fine medium, with stained and off wools from 50 to 60 cents. Scoured foreign wools have sold heavily, thousands of bales of scoured Australian and Cape wools changing hands on the basis of 58 to 62 cents for the later and 60 to 63 cents for Australian, with some choice lots at 65 to 68 cents.

Pulled wools have stiffened up again, and best wools are now held at higher prices than have prevailed since last February. Trade is still dull, especially for Chicago pullings. Choice Eastern fine A supers are quotable at 72 to 75 cents, with extras at 77 cents, A supers at 65 to 68 cents and B supers at 62 to 65 cents. Chicago B supers are held at 60 cents, without sales, the quotation being 58 to 60 cents, with A supers at 60 to 62 cents.

1916.

Three-

sold

e sea-

cents,

cents,

cents,

cents,

ng at

at 35

ghths-

arter-

or fine

or XX

wool,

rashed

ne un-

-blood threecents

to 32

1 321/2

-blood

noving

welve. urrent

cents:

to 62

he lat-

1 with

light.

nts for

edium,

50 to

s have

bales

again,

higher

ce last

East-

ents. n this

Arrivals of foreign wool at this port shows a tremendous increase, according to the figures compiled by the Boston Chamber of Commerce. Total arrivals for the month of December were 37,484,950 pounds, including 9,538,536 pounds domestic and 27,484,414 pounds foreign. This compares with 8,812,484 pounds for December, 1914, of which 8,223,750 pounds were domestic and 588,734 pounds were foreign.

For the calendar year 1915, total receipts of wool at Boston were 429,615,-063 pounds, including 181,700,678 pounds domestic and 247,914,385 pounds foreign. For the year 1914, total receipts were 334,876,120 pounds, of which 190,730,629 pounds were domestic and 144,145,491 pounds were for-

Shipments for the month of December were 25,807,204 pounds, against 15,-191,929 pounds for December, 1914. Total shipments for the calendar year 1915 were 272,473,422 pounds, against 267,149,305 pounds for the year 1914.

PROSPECTS IN NEW MEXICO.

Range conditions are not very good, lots of cold wind but very little snow or rain. Sheep are wintering only fairly well. I know of none being fed on the range. However, a large number are being fed at Roswell, New Mexico. Hay at Fort Summer, New Mexico, is \$12.00 per ton and \$3.90 more per ton freight to get it to the ranch, plus the cost of hauling and feeding to Cape the sheep. Cottonseed cake is \$41.50 asis of at ranch. I shall feed cottonseed cake 60 to to my sheep all the month of Marchsome March is our hardest month.

Losses from covotes are about the same as usual. They take a toll all year. Coyotes are being killed all the time, but like the proverbial poor "a.e pecial- with us always."

The outlook for the next wool crop at 72 is about as usual. I think there will be ents, A less wool in this section as the herds supers were cut down pretty close last fall; supers all available ewe stock was purchased es, the by Arizona ranchmen. I have the diswith A tinction of being the only sheepman, 50 far as I know, in New Mexico who

AYRES, BRIDGES & CO. Wool Merchants

Western Agents— GODDING & CHADWICK CO., 310 Dooly Block, Salt Lake City, Utah P. O. Box No. 635, Albuquerque, New Mexico

> Before Disposing of Your Wool, Phone or Write-

COFFIN & GILLMORE Wool Merchants

PHILADELPHIA, : PA.

Large Handlers of Western Wools

Local Office, D. F. Walker Block, Salt Lake City, Utah

Phone, Wasatch 4570 J. A. KEARNS, Agent

When Writing to Advertisers Mention The National Wool Grower

Jeremiah Williams & Co.

Commission Merchants

481 Summer Street, Boston, Mass.

Western Office, McIntyre Building, Salt Lake City, Utah

ships wool to the National Wool Warehouse and Storage Company. They are sending out some very interesting matter. Chaves county, New Mexico, I think is a very desirable field for proselyting. I wonder why the National Wool Warehouse and Storage

Company does not send a man to Roswell, Chaves county, New Mexico.

I am sorry I cannot attend your approaching convention. I am strong on Salt Lake City and the National Wool Growers' Association.

JOSEPH DEGRAFTENREID, New Mexico.

AROUND WHITEHALL, MONT.

Your paper is all right, especially for sheepmen. The outlook for both wool and lambs for 1916 is favorable. Sheep are wintering fine; we have not fed any hay yet. We have had some snow but not enough to interfere with range sheep. On account of plenty moisture last summer, the range is good and the sheep fat. Hay sells for about \$6.50 per ton in the stack.

Coyotes are not numerous yet, but they do a great deal of damage from time to time. I think our worst enemy is poisonous weeds, the Lupine in particular. There seems to be no cure for it at present, but we hope the Government will find a remedy sometime in the near future,

BURGOYNE & SON, Montana.

Why not pay your dues NOW?



SULPHUR

ALL GRADES—ANY QUANTITY
FROM A BAG TO A CARLOAD

Z. C. M. I. Drug Store

WOOL BAGS

than any dealer in the inter-

We handle more Wool Bags

PAPER TWINE

"Reliance" Paper Fleece Twine has the greatest possible tensile and tying strength.

SHEEP SHEARS

B. B. A. and 71 or Trades Union Shears

SOFT ARKANSAS and LILY WHITE OIL STONES



mountain region.

COYOTES

Get "More Money" for your Coyotes, Lynx Cats, Muskrat, Foxes, Beaver, Skunk and other Fur bearers collected in your section.

SHIP YOUR FURS DIRECT to "SHUBERT" the largest house in the World dealing exclusively in NORTH AMERICAN RAW FURS, a reliable, responsible, safe Fur House with an unblemished reputation existing for "more than a third of a century," a long successful record of sending Fur Shippers prompt, SATISFACTORY AND PROFITABLE returns. Write for "Examples shippers have been preclable, accurate market report and price list published. Write for it Now—it's FREE,

A. B. SHUBERT, Inc., 25-27 WEST AUSTIN AVENUE

GRAZING ON THE NATIONAL FORESTS.

According to the annual report of the Secretary of Agriculture, there were grazed last year on the National Forests under pay permits, 1,724,000 cattle and horses and 7,300,000 sheep and goats. Several hundred thousand head of milch and work animals were grazed free of charge, and more than 3,500,000 head of stock crossed the forests, feeding en route, also free of charge.

To show the increased use of the forcests for grazing, the Secretary states that during the fiscal year 1905 there were only 692,000 cattle and horses and 1,514,000 sheep and goats on approximately 85,000,000 acres. The number of animals now sustained in proportion to the area of the forests is 50 per cent greater than it was ten years ago. Since 1905 the number of persons holding grazing privileges has increased 200 eper cent. This can be attributed principally to wider use by settlers and fixed small stockmen.

According to the report, the greater p part of the summer range in the West- w ern States is in the National Forests, fl Under the regulated government systh tem the forage is utilized fully, without de injury to tree growth, and with ade ti quate safeguards against watershed no damage. It is stated that the producting tivity of the land for forage in most ta places has been restored and everywhere is increasing; the industry has be been made more stable; stock comes so from the forests in better condition hi range wars have stopped; ranch prop go erty has increased in value; and aar larger area has been made available it It is m through range improvements. probable, so the report states, that 100, ov 000,000 pounds of beef and mutton are da sold each year from herds and flocks th occupying the ranges. That the for he ests have promoted the development of the stock indutry is indicated. This is to appreciated by stockmen and they arest urging that a similar system of rangeit regulation be extended to the unre cu served public lands.

The Secretary concludes by stating W that it is not merely the stock industry

y, 1916

ONAL

rt of the

al For-

0 cattl ep an

nd head

grazed

,500,000

ts, feed-

the for-

5 there

o. Since

ec 200

that has been benefited. The grazing privilege has been so distributed as to promote healthy community growth, increase settlement, prevent monopoly, and diffuse prosperity. In other words, public control has served social as well as economic ends.

DOCKING WITH HOT IRON.

We note with interest the remarks of Mr. Edwin Blaney, upon the matter of docking lambs by the searing method, which appeared in the December y states number of The National Wool Grower.

Like Mr. Blaney, we, too, have quite rses and often been held in ridicule when advoapproxicating this simple method of parting the mber of tails of lambs, as described on page 13 rtion to of our pamphlet, "Total Per Cent per cent Lambing Rules."

However, we have received with holding much pleasure, many kind acknowledgments from those who have tried ed prin this method of docking, when in the lers and fall at shipping time, they informed us that their lambs were two to three greater pounds heavier than they had ever been e West- when they docked with the knife. Many Forests, flockmasters maintain that it is well for ent sys the lamb to bleed freely when he is without docked, this we believe true when cutith ade ting the scrotum in castrating, but can atershed not see any benefit of the heavy bleedproducing which we note when cutting the in most tail with the knife.

every-Heavy bleeding may at times prove stry has beneficial to the matured animal, as is k comes sometime also the case with man indition himself. Still we have never seen any ch prop good results in the heavy bleeding of and an animal in its maturing stage, when available it needs all its blood to bring it to rapid It is maturity. How often have we seen hat 100, owners docking lamb in the heat of tton are day, when the action of the heart was flocks the most rapid, and the circulation at its the for height, cutting the tail with the knife, oment obleeding the lamb so badly that it often This is took ten days for it to regain the they are strength it had when it was cut, surely of rangeit could not gain weight under such cire unre cumstances. "There's a Reason."

THOMAS BOYLAN, Rock River,

PAPER FLEECE TWINE

FOUR PLY

ONE PLY

IT'S STILL THE "BROWN" KIND

Made from high grade unbleached KRAFT Paper. "K-R-A-F-T" Spells STRENGTH in the paper business and STRONGEST as applied to Paper Fleece Twines.

Reliance One Ply is not so pliable, but much stronger than four ply and 11/4 cents per pound cheaper.

Reliance Four Ply is very soft and pliable, holds the knot well and has much more strength than any other four ply Twine on the market.

Reliance Paper twines resist grease and moisture better than any other makes, but are perfectly soluble under the process of wool scouring.

You Buy These Goods for SERVICE, Not Looks!

Packed for Shipment-

250 lengths 81/2 ft. each to bunch. 10 bunches a package weighing 55 lbs., and containing 2500 pieces.

Four of these packages placed together in a burlap covered bale for shipping. Burlap bales contain 10,000 pieces and weigh about 220 lbs. each.

Western Distributors-

BEMIS OMAHA BAO CO., Omaha, Nebr. BEMIS BROS. BAG CO., San Francisco, Cal. BEMIS BROS., BAG CO., Seattle, Wash. Z. C. M. I, Salt Lake City, Utah T. C. POWER & CO., Helena, Mont.

SCHERMERHORN BROS. CO.

OMAHA, NEBR.

CHICAGO **CLEVELAND** ST. LOUIS KANSAS CITY

stating Wyo. industr

011

lic

sti

sa

ra

Five dollars dues to the National Wool Growers Association include a year's subscription to the National Wool Grower.

The English Wool Situation

(By Our Correspondent In England)

BOOM PRICES.

THERE is no falling off whatever in the interest shown in the course of wool values, and as I dictate this the trade is engaged in the final series of London sales. It is really wonderful how time flies, and what is demanded at the hands of each section of the industry. New Zealand has opened its annual campaign and cable news to hand from the various selling centers has surprised everyone, though it only shows the strength of wool markets and also what is the standing of the raw materials. What a vast change one sees compared with this time in 1900 when good 40's fleeces wool was selling in Coleman Street at 8 cents per pound and even less. Good half-bred was then worth no more than 11 to 12 cents, and similar wools can now be sold quite easily at 41 cents in the grease. It seems to the writer that if the late Sir Isaac Holden were alive he would indeed be surprised to see the prices wool is making. That honored textile enthusiast, who built up the largest wool combing business in the world, prophesied that wool would fall to the price of cotton and it did so in 1900, but the writer hopes that his head will not ache before we see good crossbred fleece again in the neighborhood of 12 cents to 16 cents per pound. As a matter of fact, there is today a tremendous difference between manufacturing conditions and those obtaining in 1900, the present being a time when stocks are practically non-existent, and when everybody appears to

The Absorptive Capacity of the Trade.

want the raw material.

The latest figures published by Messrs Schwartze, Buchanan & Co., are remarkable, and to a woolgrower they are deserving of very careful attention. What surprises the writer most is the way the home trade has risen to the occasion. I have thought that Colonial writers have never done justice to the home trade, always

"lording" to the skies what Germany and France have done. The past eighteen months have shown what Germany's intentions were in buying wool in Australia, and it is very doubtful if they will take the same quantities in the future. Taking the London sales purchases, the home trade has lifted more wool than Germany, and still remains by far the largest consumer of the raw material of any single country in the world, and there has been established once and for all the supremacy of Great Britain as a wool buyer and consumer. Let us look carefully at Messrs. Schwartze, Buchanan & Company's figures showing the total supplies and deliveries to the trade. I give below particulars showing the takings of the three principal trades during recent years, the figures including direct imports and transit wools, as well as London sales purchases:

		*		
Year	Home Consumption Bales	Continental Consumption Bales	American Consumpt Bales	
1915.	.1,802,000	158,000	435,000	2,395,000
1914.	. 818,000	1,681,000	159,000	2,658,000
1913.	. 967,000	1,457,000	50,000	2,474,000
1912.	. 982,000	1,642,000	99,000	2,723,000
1911.	.1,004,000	1,586,000	48,000	2,638,000
1910.	. 932,000	1,523,000	125,000	2,580,000
1909.	. 847,000	1,447,000	171,000	2,465,000
1908.	. 829,000	1,205,000	78,000	2,112,000
1907.	. 786,000	1,263,000	146,000	2,195,000
1906.	. 693,000	1,132,000	90,000	1,915,000
1905.	. 622,000	911,000	128,000	1,672,000
1904.	. 585,000	808,000	74,000	1,467,000
1903.	. 599,000	917,000	59,000	1,575,000

The most remarkable fact is that the ly, tables have been completely turned in pri the takings of the home trade and those of of the Continent, the former having ing risen nearly 100 per cent, the latter de- Re clining from 1,689,000 bales as their to- 4 c tal takings for 1914, to only 158,000 cer bales, Germany, of course, taking noth- in ing. It simply means that up to the eve end of the seventh series of London 3 c sales there had been absorbed 2,395,000 con bales of Colonial wool, this total in- sco cluding the production of South Africa cen as well as Australasia. This shows wo that the consumptive end of the trade litt has about kept pace with production, and



SALT LAKE CITY, UTAH

Whenever You Have Tire Trouble Refer to these Advantages of PENNSYLVANIA Oilproof VACUUM CUP TIRES GUARANTEED not to skid on wet or greasy pavements, else returnable at full purchase price after reasonable trial. GUARANTEED oilproof. V.C.'s save you money by eliminating oil rot and tread softening. GUARANTEED for 6 000 miles, with an average lire nearer double that. No other tires are sold on such a definitely satisfactory basis. THE SALT LAKE HARDWARE CO. WESTERN DISTRIBUTORS

1916.

many

t Ger-

wool

ubtful

ntities

ondon

, and

consu-

single

e has

ll the

wool

care-

hanan

e total

de. I

g the

trades

nclud-

wools,

395,000

658,000

474,000

723,000 638,000

580,000

465,000

,112,000

195,000

,915,000 ,672,000

,467,000

,575,000

nat the

ned in

1 those

having

ter de-

eir to-

158,000

g noth-

to the

es:

past

and the trade has entered upon the purchasing of the new clip of wool in a thorough and enthusiastic way.

Why Wool Values are High.

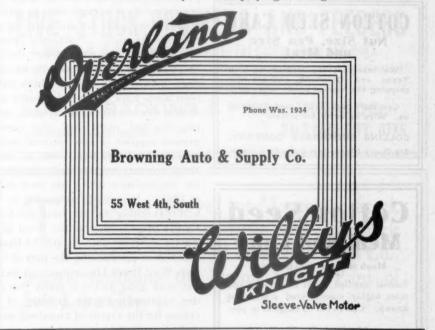
No doubt many readers will have wondered many a time why values are high in these times of war, when the opposite was expected. The principal reason I think is the boom in trade, and the tremendous requirements which the war has created. The whimperings of a few silly socialists regarding the war are not worth taking the least notice of, for the present war from a British standpoint is being waged in the interests of freedom in the future for all English speaking subjects, and it will be fought to a successful finish. The demands the struggle has made upon the wool trade is the great factor in bringing prices to where they are today, tremendous demands having been made upon machinery wherever it has been available. A war of the present magnitude could not be waged, without provision being made for the millions of men at present engaged in the struggle, and every one knows that if a man is to fight he must be well clothed and well fed. It has been well said that as one door shuts another opens, and that is true in regard to Germany being off the map for the time being as a competitor for our Colonial wool, a bigger and more acceptable outlet opening in the increased call for the raw material at the hands of Great Britain, Japan, and America.

London Wool Sales.

The auctions are going magnificently, and the end of the year is finding prices at the highest point of the whole of 1915. The demand is really astounding for all descriptions of raw material. Really good Merinos are fetching 3 to 4 cents above last series, and prices are cents per pound higher than they were in the highest boom year of 1899, and even medium and faulty wools are 2 to ondon 3 cents dearer than last sales. Russia 395,000 continues to be a keen buyer of clean tal in scoured Merinos, and has paid up to 77 Africa cents. Medium and faulty scoured shows wools are 4 cents higher. There is very e trade little crossbred fleece wool available, uction and anything at all decent is making 3

to 4 cents more, and the same must have operated very extensively in New be said for sliped crossbreds. As a Zealand and Australia, partly with matter of fact, the sales are making German-American money, in readiness record figures, and what has come over the situation, is somewhat unexpected. America has not been a big buyer, the reason being that only this week licenses have been obtained for the shipment of the wools bought last series, and there is some fear in the best informed circles of the embargo being replaced any time. It is no use hiding the fact that the impression prevails at the War Office that American buyers

for the war finishing. I think that what has been bought will be shipped to your side, but the feeling is not too good. Great Britain has no objection to supplying legitimate American wants, but does not like to be hoodwinked by presumably American operators, and then to find later on that the wool has been bought on German account. Nobody wants to see any breach, and playing a straight card will serve



Now that the golden days are here—when Nature is painting her hills and dales with richest Autumn hues—when the air is fresh and bracing and the roads are smooth and hard—now is the time to enjoy to the utmost the glorious pleasure of bowling along with a party of friends in your "merry Oldsmobile."

You, Mr. Busy Man! You, who think that you are tied to your desk with no time to enjoy the pleasures that life holds out to you for the taking—you who have not felt the keen thrill of pleasure when you slide in back of the big polished wheel of your auto and sally forth, new worlds to see, new pleasures to enjoy and a new life to live. a new life to live.

Take time to live, Mr. Busy Man-you'll live a little longer for every day you spend in the open, and whether you think so now or not, your business will benefit by your outings—and to get every ounce of pleasure that lies in motoring, you should drive the car that runs without a murmur—that responds to the slightest wish of the driver—that "seems to feel the thrill of life," and participates in the joy of the owner.

Your Olds "43" Is Here for You Now.

No delay-no wait. You can select your car and drive home in it.

RANDALL-DODD AUTO CO., Ltd.

Auto Row, Salt Lake. Wasatch 4560.

best all purposes alike. The year is finishing with values at the top point, and no doubt the course of London and Colonial sales has materially strengthened the position of American domestic wools.

WM, B. HUGHES PRODUCE CO.

Wholesale Dealers In
WHEAT, OATS, BARLEY, CORN and HAY
Oar Lots Only.

Office 219 Moose Club Bidg., SALT LAKE CITY, UTAH

COTTON SEED CAKE Nut Size, Pea Size and Meal

We represent the largest mills in Texas and Oklahoma, and are now shipping the highest grade obtainable.

Can start cars on 24 hours notice to us. Wire or write for prices.

COLLINS BROKERAGE COMPANY, 318 Dooly Block, Salt Lake City, Utah.

Cotton Seed Meal and Cake

Much cheaper than last year.

Easiest handled, most economical and most highly concentrated stock food known. Can be fed on range or in pen.

Absolutely No Waste.

WRITE OR WIRE AT MY EXPENSE

JOHN A. STONE,

702 BOSTON BUILDING

SALT LAKE CITY, UTAH

Since last writing prices have all moved upwards in harmony with a big trade. Good 64's tops got down in Bradford to 72-cent basis in September. but today as I write many firms are demanding 88 cents, although 86c is a nearer selling basis. The whole situation is full of interest. Spindles and looms are busy, all the mills throughout Yorkshire have been compelled to put up green or black blinds, and the factories are no longer targets for the German Zeppelins, none so far having put in an appearance inland and none are expected. Overtime is very general and many mills are still running all through the night. Practically speaking Yorkshire has got through double the weight of wool which she usually does, because the fabrics which have been made have demanded a larger use of new wool, while so many mills running day and night has also meant greater supplies of raw material being consumed. There has been a very sharp recovery in crossbreds, thanks to the big business which has been done in khaki. It is most interesting to be told that during the past fortnight Russia has placed orders in the West Riding for about six million yards of khaki. The recent agitation on the part of our own War Trade Department no doubt has done good, and it is really this order, together with the granting of licenses for the export of crossbred wool and tops which has lifted the whole crossbred position out of the mire. Accounts from Buenos Aires clearly indicate that conditions there are booming, and it is said that Germany is buying considerable weights of wool in anticipation of the war finishing. Let us hope this will be very soon.

The Outlook,

Anything that can be said regarding the future seems on the surface to be superfluous, and yet readers of the National Wool Grower will be very largely interested in what appears likely to take place in the wool world during the next few months. The outlook is certainly very favorable. Current prices no doubt have been largely dictated by the onslaught of America, Italy and Japan, and it is felt in England that no one can really expect to see prices very materially increase. It seems to the majority as if wool is dear enough, but so long as business is possible at current prices, no doubt it will be done. At the same time when values get in the neighborhood of where they were in 1899, it shows a very strong situation. There is less margin today for topmakers than there was, but spinners are still on velvet. The price of wool and the cost of tops are nearer together than for some months, but still margins are satisfactory. The chief concern of everyone is to see trade continue on today's level, and that looks like being fully assured. The market is certainly very healthy, and the outlook is favorable. Even when the war finishes, the writer entertains the view that prices will not reced, because there are waiting hungry manufacturers in the Netherlands and Scandinavia who are wanting buy at the first opportunity that less is going to be sold in London during 1916. It matters not where it is put up for sale, there being buyers who apparently are prepared to absorb every class of raw material, and pay full market values for it. I regard the outlook for 1916 as being very good.

Cotton Seed Meal and Cake

"EQUITY BRAND"

GIVES RESULTS

Those who feed it know. Quality and weights guaranteed. Write or wire us today for delivered prices. BUY IT NOW!

FEEDERS' SUPPLY COMPANY

532-4-6-8 STOCK EXCHANGE BLDG., KANSAS CITY, MO.

WORTH THE MONEY.

Enclosed please find check for dues to the National Association and subscription to the National Wool Grower. This paper should be well patronized by sheepmen as it is their organ.

SWASTIKA SHEEP CO., Wyo.

All dues are due January first.

rding

to be

e Na-

large-

ely to

luring

ook is

prices

ctated

ly and

hat no

s very

to the

h, but

t cur-

done.

get in

were

situa-

ay for

inners

f wool

gether

mar-

f con-

e con-

looks

narket

e out-

ne war

e view

ecause

manu-

and

that

Lon-

s not

being

ared to

al, and

I re-

g very

g to

AROUND ORIN, WYOMING.

I am rather short on sheep news in this section as I have quit the sheep business and am going to raise sugar beets. You know the boosters all say that there are large returns and little work and that it is hard to get the farmers around Douglas to engage in a money making business. But I remember what you said about boosting and as you say I am afraid they are going a little strong. So have just let my sheep out on the shares.

I am to receive half of the wool and half of the wether lambs which are to be sold each fall the ewe lambs to be run in the herd for five years, at that time I am to receive one thousand the original number and half the remaining herd, they to receive the benefit from the old ewes they sell, they to stand the expenses of the outfit.

I look for rather a wet winter so sold all my lambs, they bringing eight ten in Denver and weighing fifty-eight pounds. My old ewes brought around five dollars per head.

The weather has been just right here. Enough snow to keep a fellow out on good feed and not enough to do any harm. The last week has been rather cold and quite a fall of snow.

I always feed corn, after loosing eighty per cent in the spring of '12. One sack a day which is not very much but I think it is a good insurance if the weather should turn bad. It doesn't do as much good as it should. As they will come in earlier in the evening to pick up the grains that they leave in the morning.

The grass is better than it has been for years and there is plenty of hay. The most of the alfalfa is a little black as it was rained on when it was being put up. Good native hay has sold around ten to eleven dollars. Have not heard of any alfalfa sales, but think that off the railroad can be bought for about three to five dollars.

We do not feed many sheep in this country, that is fattening them for market. There is a party feeding six thousand lambs on Horseshoe Cr. to turn on the range next summer. He believes



Salt Lake City. Utah

Courtesy, Helpfulness, Strength

National Copper Bank
SALT LAKE CITY

LIVE STOCK GROWERS AND FEEDERS

We are at all times in the market for Fat Cattle, Sheep and Hogs.
CALL US ON LONG DISTANCE TELEPHONE, OR WIRE US FOR PRICES.

UTAH PACKING & PROVISION CO.
TELEPHONES: Wasatch 1826-1827 SALT LAKE CITY, UTAH

THIS Space reserved for Montpelier Stock Yards, grazing pastures, and other stock yards operated by Leary & Warren Co., lessees, including the Union Stock Yard of Salt Lake City.

THE BEST SERVICE

FOR BANKS AND STOCKMEN HAVING ANY TRANSACTIONS AT THE CHICAGO LIVE STOCK MARKET IS SECURED BY AN ACCOUNT WITH

THE LIVE STOCK

EXCHANGENATIONAL

BANK

OF CHICAGO

"THE BANK OF GOOD SERVICE"

CAPITAL \$1,250,000

RESOURCES \$15,000,000

d subrower.

, Wyo.

they will be worth some six:or seven dollars next fall.

We are not doing much here with the coyotes as they are very numerous, and we have a good many dry farmers and cattlemen who say: "Let them go, they may kill a sheep some day." The state has a bounty of a dollar and a half which is a good way to rid the country of them. I think the U. S.

George Mackerrow Bryson Architect

Telephone Wasatch 1482 701 Boston Building Sait Lake City, Utah

ORES

MINERALS

A. E. Custer

ASSAYER AND CHEMIST.
Formerly Chief Chemist and Assayer,
Bingham Smelter, Midvale, Utah.

Also four years with
U. S. Government Assay Office,
Salt Lake City, Utah.
31 Postoffice Place.
SALT LAKE CITY, UTAH.

Phone Wasatch 2041.
Send for free mailing pouches and price list.

should take it up and offer a bounty and keep it up all the time. A bounty is put on and when they are thined out a little, then no one thinks of them and the bounty is taken off and they increase again till they get so numerous that every one takes it up and puts it back on again.

We have had a very wet season and I expect plenty of dry farmers next spring. These have done pretty well last year. I believe that these that are here will stay and there are still more to come. First it was all open, then the "nesters," who now are the prosperous ranchers, came and took the creeks away from the big cattle outfits. Now comes the dry farmer to get the flats and eventually the rough land will go also. The time is not far off now. That is, not over ten years for this part of the country.

My summer range is in the mountains and I figure that I can pull through for five years and then it will be better sheep and less of them. Your articles on the national forest were certainly good and I got some mighty good feed with a pack outfit through your influence.

I think there will be more wool next year as everybody saved quite a number of their ewe lambs. I don't know of an outfit going out of business. Our wool market did not move off very free last spring. If it had not been for "The National," we would have taken quite a little less than we did. I know you were up against a strong proposition as all at once no one wanted to buy any wool at any price and just then every one wanted to sell. I think on a whole, that wool in this section sold for less than it did in '14, as this year the wool was so much cleaner. My wool was every bit as good as it was in '14, but some four pound lighter. In '14 I received 171/2 in '15 only 231/2 which figures 34 cents a head less than in '14 on account of the wool being so clean. I lambed up in the mountains and it rained every day and there was no sand to blow in the wool. This I think is not giving a fellow a square deal, and if I was the least bit inventive I would build a fanning mill in connection with my shearing pens and blow about the right amount of fine sand in the wool before I sheared.

The wool buyer figures on this a little, but not enough. The fellow, with a poor article, gets a better price than the fellow with an exceptional good one. The mills ought to come out and buy their own wool and tell us how to put it up then we would get credit for what we do. We don't need wool buyers as we can sell direct to the mill and split his profit between us. What I would like to see is more good wool commission houses like we have in all of the livestock markets for live stock. They don't allow enough for paper twine or wool put up in good shape.

Please find enclosed my renewal and three new subscriptions to the "National Wool Grower," the paper we need in the west.

PAUL N. SHAW, Wyoming.

Unless more Western sheepmen are willing to give \$5.00 per year to the National Wool Growers' Association, the organization will be unable to continue.

Hubbard Investment Co.

BUILDING SITES IN ALL PARTS OF CITY. LOW PRICES. EASY TERMS. A FEW GREAT BARGAINS IN BUSINESS PROPERTY.

66 West Broadway

Salt Lake City, Utah

LET EARDLEY BROS. DO IT

Everything for Electricity. Auto Accessories. Expert Repairing. 29 w. BROADWAY 100% Service. SALT LAKE CITY, UTAH

THE W. A. BYWATER PLUMBING & HEATING CO.

20 E. So. Temple St., Salt Lake City, Utah

FIRST CLASS PLUMBING AND HEATING OF ALL KINDS.
GIVE US A CHANCE TO FIGURE WITH YOU.

l next

know

s. Our

y free

"The

quite

w you

sition

anted

price

ranted

wool

it did

ry bit

e four

1 171/2

cents

int of

ed up

every

ow in

ving a

as the

a fan-

shear-

right

before

a lit-

, with

e than

good

at and

how

credit

e mill

What

in all

stock.

paper

al and "Na-

r we

ming.

epmen

to the

iation,

o con-

pe.

IDAHO WOOLGROWERS MEET.

The Idaho Wool Growers' Association held their annual meeting at Boise, December 28, 29 and 30. The meeting was well attended and practically all portions of the state were represented. It was one of the best state meetings that has been held for many years. Idaho woolgrowers are showing more interest in their Association, and well they may, for it has served them well in the past, and has some important work before it for the future.

The first day was devoted largely to conference with the officials of the different National Forests, and a spirit of perfect co-operation prevailed. Idaho at the start fought the forests harder than most any of the other states, but now since a better understanding exists both on the part of the sheepmen and the forest officials, there is the closest co-operation. The Idaho Association urged the different reserves to collect an additional half cent per head. and use the funds to spread poison on the forest ranges after the sheep leave them in the fall. Also the principles of deferring and rotation grazing in the Forests were strongly endorsed. All sheepmen who have been handling their sheep under this method, reported splendid results both to the sheep and the range.

The decision of the Supreme Court of Idaho to the effect that sheep could not use range originally used by cattle, was thoroughly considered, and appropriate action will be taken to protect the rights of Idaho sheepmen.

The wild animal question was considered and all present agreed to take vigorous measures against the coyote, not only for the present, but for the future as well.

An officer of the National Wool Growers' Association suggested the necessity of withdrawing trails on the public domain, by which stock might reach the National Forests. This matter had already been presented to the forestry service by the National Association, and the Idaho people endorsed the move, and will urge the Idaho delegation in Congress to have these trails

CITY COAL COMPANY

PHONE: WASATOH 420

KLEAN KOLE

J. W. OTTENSTEIN. Mgr.

277 SOUTH MAIN STREET

SALT LAKE CITY, UTAH

Farmers and Stockgrowers Bank

SALT LAKE CITY, UTAH

Capital \$300,000.00

Surplus and Profits \$20,000.00

National City Bank

CAPITAL AND SURPLUS - \$300,000

SALT LAKE CITY, UTAH

The McIntyre Building

Salt Lake City, Utah

Is Headquarters for the NATIONAL and UTAH WOOL GROWERS' ASSOCIATIONS

The Most Modern Fire-proof Building in the City

OFFICES FOR RENT

EVERY WOOL GROWER NEEDS AN ATTRACTIVE LETTER HEAD

WE PRINT THE

National Wool Grower

THAT IS A SAMPLE OF OUR WORK

We will furnish a nice half tone and get you up an attractive letter head and envelope. It will help your business.

FOR PARTICULARS WRITE THE

CENTURY PRINTING COMPANY

W. G. ROMNEY. J. Q. RYAN.

CENTURY BLDG., 231-3-5 EDISON ST., SALT LAKE

CONTINENTAL DORSET CLUB

Membership fee, \$5. "No other sheep in the world has in it the capacity for profit that has the "Dorset Horn."

President-Arthur Danks, Allamuchy, N. J.

Secretary-E. Chidester, Mechanicsburg, Ohio.

Write the Secretary for information and printed matter about Dorsets.

American Rambouillet Sheep Breeders Ass'n

Membership Fee \$10. No annual dues. Flock books free to members. Volume XVI ready for delivery and pedigrees now being received for Volume XVII. Over 77,000 sheep on record.

President—R. A. JACKSON,
Dayton, Washington.
Secretary—DWIGHT LINCOLN,
Milford Center, Ohio.

For history of the breed, list of members, rules, blanks, etc., address the Secretary.

American Shropshire Registry Ass'n

Organized 1884. 4750 Stockholders Shares of Stock \$5.00. No Annual Dues. Volume XXIX Opened Oct. 1, 1914, Printed Matter, Blanks, and Information FREE upon Application to the Secretary.

A. J. KNOLLIN, Pres., South Omaha, Neb. J. M. WADE, Sec'y., LaFayette, Indiana

American Hampshire Sheep Ass'n

Organized in 1889. Membership fee \$5.00. Pedigrees now being received for Vol. XII of the Flock Record. Write the Secretary for information and printed matter. A postal card will bring it. Write today.

F. J. HAGENBARTH, Pres. Spencer, Idaho.

COMFORT TYLER, Secretary, 310 E. Chicago St., Coldwater, Mich. set aside, before the public domain is further settled.

The 640 acre homestead proposal was discussed, and the Association went on record as opposing such homesteads, previous to a time when the land has been classified, so as to determine what it is best suited for.

The matter of the failure to deliver cottonseed cake at the time it was promised was considered, and the Association will probably take legal steps to protect its members who have been injured. Also it was thought that by buying this cake through the Association, a considerable saving might be effected.

The salt question was considered, and the Association determined to enter into a new contract to supply its members with salt during the ensuing year. It was shown that by supplying salt through the Association they could obtain a good grade of salt and save large sums of money to sheepmen who belong to the Association.

Lack of space forbids our enumerating all the subjects that were considered at the Idaho Wool Growers' meeting. Enough to say that the meeting was an enthusiastic one, and renewed faith is indicated on the part of the Idaho sheepmen.

Mr. Hugh Sproat of Boise, Idaho, was elected president, and Mr. John Ridenbaugh of Boise, secretary.

NEAR WALLA WALLA, WASH.

Enclosed are my yearly dues to the National Wool Growers' Association. Please change my address to Slater, Wash., instead of Touchet.

Sheep are wintering fairly well this winter here. We had a very dry fall after coming home from the mountains the feed was dry grass and since about Thanksgiving time, there has been a little green feed, but frosty nights have held the grass back considerably.

We have had two small falls of snow here and the thermometer was standing between 15 and 24 degrees above zero for three days.

Sheep seem the highest we have known, especially scarcity of fine wool breeding ewes is felt here due to the raising and selling of mutton lambs.

I believe there are a few more sheep wintering in Walla Walla county this winter than has been for four or five years.

Coyotes seem pretty thick this winter due perhaps to two reasons. One reason is, absence of state bounty, and the other is presence of thousands of jackrabbits.

I hate very much to see coyotes but my loss of sheep from that source in the winter range is small; none almost. Occasionally a sheep may get so sick suddenly that they cannot follow the band and are left out over night, then sometimes a coyote will find them, although it sometimes happens they do not find them the first night.

Jackrabbits in this vicinity are eating up enough of the range to be very noticeable as a pest even more than the coyote at present.

But I hope you arouse interest enough in the people to completely eradicate the coyote. He is a pest to be loathed by everybody for he causes lots of vigilance to prevent his depredations.

Yours,

ELMER D. BRYSON, Washington.

USING FEWER DOGS.

Discussing the subject of handling sheep on the range, Governor Gooding of Idaho spoke as follows:

"If we could eliminate the covote, we could handle our sheep without dogs in very many sections. This would result in bigger lambs, more lambs, and better wool. This summer I offered a substantial bonus to my herders that turned in the most and best lambs. As a result my sheep were handled better while on the summer range than in the past years. Some of my herders tied up their dogs and used no dogs around the flock for a period of thirty days. The less the dog was used, the better the lambs. I do not mean to be understood as saying that we can get along without dogs, but if the coyote was eliminated, we could do so to a very large extent."